

APR 22 1924

U. S. DEPARTMENT OF LABOR
JAMES J. DAVIS, Secretary
BUREAU OF LABOR STATISTICS
ETHELBERT STEWART, Commissioner

PERIODICAL ROOM
GENERAL LIBRARY
UNIV. OF MICH.

MONTHLY

LABOR REVIEW

Vol. XVIII, No. 4



April, 1924

SPECIAL FEATURES IN THIS ISSUE

Convict labor: 1923

Shifting of occupations among industrial policy-holders

German Metal Workers' Federation

Land law of Esthonia

Labor law of Durango, Mexico

Steadying the worker's income—Unemployment insurance plans

WASHINGTON
GOVERNMENT PRINTING OFFICE
1924

Sp

Inc

Pr

Wa

Mi

Ch

La

Contents.

	Page.
Special articles:	
Convict labor: 1923.....	1-33
Shifting of occupations among wage earners as determined by occupational history of industrial policyholders, by Louis I. Dublin, Ph. D., statistician, and Robert J. Vane, jr., of the Metropolitan Life Insurance Co., New York.....	34-42
The German Metal Workers' Federation, by Fritz Kummer, editor of Metallarbeiter-Zeitung.....	42-52
Land law of Esthonia, by Andrew Pranspill.....	53-59
Industrial relations and labor conditions:	
Industrial relations in West Coast lumber industry.....	60, 61
Work of Railroad Labor Board, April, 1920, to November, 1923.....	61-64
Negro migration in 1923.....	64-66
Prices and cost of living:	
Retail prices of food in the United States.....	67-88
Retail prices of coal in the United States.....	88-91
Index numbers of wholesale prices in February, 1924.....	92
Comparison of retail price changes in the United States and foreign countries.....	93-95
Denmark—Retail prices in July, 1923, and January, 1924.....	95, 96
Wages and hours of labor:	
Massachusetts—Earnings of male and female workers in manufacturing establishments, January, 1924.....	97
Wisconsin—Average weekly earnings in factory employments.....	98
China—	
Wages in Hongkong in December, 1923.....	98
Working hours in Shanghai silk factories.....	98
Minimum wage:	
Great Britain—Work of trade boards.....	99-101
Child labor:	
New York—Trend of child labor.....	102, 103
Virginia—Child labor on Norfolk truck farms.....	103, 104
Labor agreements, awards, and decisions:	
Railroads—Decisions of Railroad Labor Board—	
Wages and working rules.....	105-108
Liability of new management to apply decisions made during receivership.....	108, 109
Contract work.....	109, 110
Night work.....	110
Election of employee representatives.....	110-113
Coverage of trade-union agreement.....	113, 114
Violation of board's decisions.....	114
Bituminous coal industry—interstate agreement.....	114
Fur workers—New York City.....	114, 115
Garment industry—Cleveland.....	115, 116
Retail clerks—Butte, Mont.....	116-119
Denmark—Collective agreement in agriculture.....	119

Employment and unemployment:

	Page.
Employment in selected industries in February, 1924	120-132
Employment and earnings of railroad employees, January, 1924, and January and December, 1923	133, 134
Extent of operation of bituminous coal mines, February 2-23, 1924 ..	134
Recent employment statistics—	
Connecticut	134, 135
Illinois	135
Iowa	135
Maryland	136
Massachusetts	137, 138
New York	138-140
Wisconsin	140, 141

Industrial accidents and hygiene:

Metal-mine accidents in the United States in 1922	142, 143
Accidents at metallurgical works in the United States in 1922	144, 145
Poisoning from small quantities of mercurial vapor	145-147
Action of irritant gases upon the respiratory tract	147-151

Workmen's compensation and social insurance:

Steadying the worker's income—Establishment unemployment insur- ance plans, by Margaret Gadsby, of the United States Bureau of Labor Statistics	152-174
Sick benefits paid by International Molder's Union	175
Recent compensation reports—	
Hawaii	175, 176
North Dakota	176, 177
Great Britain	177-179
Oregon—Shall the State insurance fund be made competitive?	179-181
France—Old-age and invalidity pensions of miners	181, 182
Great Britain—	
An unemployment insurance and profit-sharing plan	182, 183
Recommendations of Imperial Economic Conference respecting workmen's compensation	183, 184

Labor laws and court decisions:

Labor law of Durango, Mexico, by Ethel C. Yohe, of the United States Bureau of Labor Statistics	185-196
Admiralty jurisdiction over stevedores	196-198
California—Restriction of marketing of building materials shipped in interstate commerce	198, 199
Illinois—Conspiracy to collect money for strike settlement	199, 200
New York—Award concerning duration of bonus offered to brick- layers	200, 201

Cooperation:

New York—Cooperative housing in New York City	202
Cooperation in foreign countries—	
Austria	203
Canada	203
Czechoslovakia	203, 204
Denmark	204
France	204, 205
Germany	205
Great Britain	205, 206
Greece	206, 207
Italy	207

CONTENTS.

V

Cooperation—Concluded.

Cooperation in foreign countries—Concluded.

	Page.
Mexico.....	207
Poland.....	207
Portugal.....	208
Spain.....	208
Switzerland.....	208

Strikes and lockouts:

Chile—Strikes in 1923.....	209
Netherlands—Strikes and lockouts in 1922.....	209, 210

Conciliation and arbitration:

Conciliation work of the Department of Labor in February, 1924, by Hugh L. Kerwin, Director of Conciliation.....	211-213
---	---------

Immigration:

Statistics of immigration for January, 1924, by W. W. Husband, Commissioner General of Immigration.....	214-218
Denmark—Emigration, 1923.....	218

Factory inspection:

Massachusetts.....	219
Pennsylvania.....	219
Italy.....	219, 220

What State labor bureaus are doing:

Massachusetts.....	221
Pennsylvania.....	221

Current notes of interest to labor:

International labor conference, 1924.....	222
Proposed international conference on legal aid work.....	222, 223
Chile—	
Industrial association.....	223
Creation of a labor university.....	223
Germany—Income tax rates of workers.....	223, 224
Great Britain—Standardization of coal-mining requisites.....	224

Publications relating to labor:

Official—United States.....	225, 226
Official—Foreign countries.....	226-230
Unofficial.....	230-233

100	General introduction to the study of labor history
101	1. The labor movement in the United States
102	2. The labor movement in Europe
103	3. The labor movement in Asia
104	4. The labor movement in Africa
105	5. The labor movement in Latin America
106	6. The labor movement in the Middle East
107	7. The labor movement in Oceania
108	8. The labor movement in the Soviet Union
109	9. The labor movement in the People's Republic of China
110	10. The labor movement in the Democratic People's Republic of Korea
111	11. The labor movement in the Republic of China
112	12. The labor movement in the Republic of Vietnam
113	13. The labor movement in the Democratic Republic of Vietnam
114	14. The labor movement in the Republic of Cuba
115	15. The labor movement in the Republic of Haiti
116	16. The labor movement in the Republic of the Dominican Republic
117	17. The labor movement in the Republic of the Philippines
118	18. The labor movement in the Republic of Indonesia
119	19. The labor movement in the Republic of Malaysia
120	20. The labor movement in the Republic of Singapore
121	21. The labor movement in the Republic of Thailand
122	22. The labor movement in the Republic of Burma
123	23. The labor movement in the Republic of Cambodia
124	24. The labor movement in the Republic of Laos
125	25. The labor movement in the Republic of Vietnam
126	26. The labor movement in the Republic of North Vietnam
127	27. The labor movement in the Republic of South Vietnam
128	28. The labor movement in the Republic of Laos
129	29. The labor movement in the Republic of Cambodia
130	30. The labor movement in the Republic of Thailand
131	31. The labor movement in the Republic of Malaysia
132	32. The labor movement in the Republic of Singapore
133	33. The labor movement in the Republic of Indonesia
134	34. The labor movement in the Republic of the Philippines
135	35. The labor movement in the Republic of the Dominican Republic
136	36. The labor movement in the Republic of Haiti
137	37. The labor movement in the Republic of Cuba
138	38. The labor movement in the Republic of the Soviet Union
139	39. The labor movement in the Republic of China
140	40. The labor movement in the Republic of Korea
141	41. The labor movement in the Republic of Vietnam
142	42. The labor movement in the Republic of North Vietnam
143	43. The labor movement in the Republic of South Vietnam
144	44. The labor movement in the Republic of Laos
145	45. The labor movement in the Republic of Cambodia
146	46. The labor movement in the Republic of Thailand
147	47. The labor movement in the Republic of Malaysia
148	48. The labor movement in the Republic of Singapore
149	49. The labor movement in the Republic of Indonesia
150	50. The labor movement in the Republic of the Philippines
151	51. The labor movement in the Republic of the Dominican Republic
152	52. The labor movement in the Republic of Haiti
153	53. The labor movement in the Republic of Cuba
154	54. The labor movement in the Republic of the Soviet Union
155	55. The labor movement in the Republic of China
156	56. The labor movement in the Republic of Korea
157	57. The labor movement in the Republic of Vietnam
158	58. The labor movement in the Republic of North Vietnam
159	59. The labor movement in the Republic of South Vietnam
160	60. The labor movement in the Republic of Laos
161	61. The labor movement in the Republic of Cambodia
162	62. The labor movement in the Republic of Thailand
163	63. The labor movement in the Republic of Malaysia
164	64. The labor movement in the Republic of Singapore
165	65. The labor movement in the Republic of Indonesia
166	66. The labor movement in the Republic of the Philippines
167	67. The labor movement in the Republic of the Dominican Republic
168	68. The labor movement in the Republic of Haiti
169	69. The labor movement in the Republic of Cuba
170	70. The labor movement in the Republic of the Soviet Union
171	71. The labor movement in the Republic of China
172	72. The labor movement in the Republic of Korea
173	73. The labor movement in the Republic of Vietnam
174	74. The labor movement in the Republic of North Vietnam
175	75. The labor movement in the Republic of South Vietnam
176	76. The labor movement in the Republic of Laos
177	77. The labor movement in the Republic of Cambodia
178	78. The labor movement in the Republic of Thailand
179	79. The labor movement in the Republic of Malaysia
180	80. The labor movement in the Republic of Singapore
181	81. The labor movement in the Republic of Indonesia
182	82. The labor movement in the Republic of the Philippines
183	83. The labor movement in the Republic of the Dominican Republic
184	84. The labor movement in the Republic of Haiti
185	85. The labor movement in the Republic of Cuba
186	86. The labor movement in the Republic of the Soviet Union
187	87. The labor movement in the Republic of China
188	88. The labor movement in the Republic of Korea
189	89. The labor movement in the Republic of Vietnam
190	90. The labor movement in the Republic of North Vietnam
191	91. The labor movement in the Republic of South Vietnam
192	92. The labor movement in the Republic of Laos
193	93. The labor movement in the Republic of Cambodia
194	94. The labor movement in the Republic of Thailand
195	95. The labor movement in the Republic of Malaysia
196	96. The labor movement in the Republic of Singapore
197	97. The labor movement in the Republic of Indonesia
198	98. The labor movement in the Republic of the Philippines
199	99. The labor movement in the Republic of the Dominican Republic
200	100. The labor movement in the Republic of Haiti

MONTHLY LABOR REVIEW

VOL. XVIII, NO. 4

WASHINGTON

APRIL, 1924

Convict Labor: 1923.

IN THE latter part of 1923 the Bureau of Labor Statistics began the collection of data concerning prison labor production in the United States and an abridged report is here presented. A full report will be published later as a bulletin.

The study covers only State and Federal prisons for civilian adults. It does not include juvenile reformatories or county or city institutions or Federal military prisons.

The primary purpose of the inquiry is to show the kind and amount of goods produced by prison labor and the systems under which the work was done.

A total of 104 institutions were canvassed, 101 being State institutions and 3 Federal. All States, and also the District of Columbia, were covered. The New Castle County (Delaware) workhouse is included, as it serves the purpose of a State prison. The institutions bear various titles, as prison, penitentiary, reformatory, house of correction, workhouse, farm, camp, etc. In some States prison units are reported separately; in other States they are combined, as will appear in the tables, depending on the method of prison accounting.

The report for each institution covers all of the operations during one year. It was necessary to take the report for the last fiscal year for which figures were available. The fiscal years reported ended variously from June 30, 1922, to September 30, 1923. For 61 reports the year ended June 30, 1923.

The average number of convicts found in the institutions reported was 84,761, of which 79,350 were in State institutions and 5,411 in Federal prisons. Of these 84,761 convicts 51,262, or 60 per cent, were employed at productive labor. This number does not include convicts engaged in domestic prison duties, like cooking, washing, cleaning, etc. Of the 51,262 convicts employed at productive labor, 6,083, or 12 per cent, were working under the contract system; 3,039, or 6 per cent, under the piece-price system; 13,535, or 26 per cent, under the public-account system; 18,842, or 37 per cent, under the State-use system; and 9,763, or 19 per cent, under the public works and ways system. No figures were reported by any of these institutions as to convicts employed under the lease system.

The relative importance of the several systems is further indicated by the value of the goods produced, as shown by the totals in the accompanying tables. The systems are defined as follows:

Contract system.—Under this system the State feeds, clothes, houses, and guards the convict. To do this the State maintains an institution and a force of guards and other employees. A contractor engages with the State for the labor of the convicts, which is performed in or near the institution. The contractor pays the State a stipulated amount per capita for the services of the convict, usually supplies his own raw material, and superintends the work.

Piece-price system.—This system differs from the contract system only as to superintending the work and determining the speed at which convicts must work. The State maintains the institution and feeds, clothes, and guards the convicts. The contractor supplies the raw material and pays the State an agreed amount for the work done on each piece or article manufactured by the convicts. The supervision of the work is generally performed by a prison official, although sometimes by the contractors. The officials of the prison not only maintain discipline, but dictate the daily quantity of work required.

Public-account system.—So far as the convict is concerned, this system does not differ from the piece-price system, but for the institution it is an entirely different system. In the piece-price system the contractor finances the business and assumes all the chances of profit and loss. In the public-account system the State enters the field of manufacturing on its own account. It buys the raw material, manufactures and puts the product on the market, and assumes all the risk of conducting a manufacturing business. The State has the entire care and control of the convicts, and with them conducts an ordinary factory. The institution may sell the product direct or through an agent.

State-use system.—Under this system the State conducts a business of manufacture or production, as in the public-account system, but the use or sale of the goods produced is limited to the same institution or to other State institutions. The principle of the system is that the State shall produce articles of merchandise for its own consumption alone.

Public works and ways system.—This system is very nearly like the State-use system. Under this system the labor is not applied to the manufacture of articles of merchandise, but to the construction and repair of the prison or other public buildings, roads, parks, breakwaters, or other permanent public structures. Possibly a lessee may be constructing a road with hired convict labor; in such case the road would be classed under the lease system, as the system, not the product, is here considered.

Lease system.—Under this system the State enters into a contract with a lessee, who agrees to receive the convict, to feed, clothe, house, and guard him, to keep him at work, and to pay the State a specified amount for his labor. The State reserves the right to make rules for the care of the convict and to inspect the convict's quarters and place of work. No institution is maintained by the State other than a place of detention, where the convicts can be held until placed in the hands of the lessee and in which to confine convicts who are unable to work.

Conditions are not always so clearly defined as the above definitions would indicate, and it was difficult to determine with entire satisfaction the classification assignment of certain items. Again, the major quantity of an article produced in an institution may fall under one system, with a minor surplus classed under another system. For example, an article may be produced primarily for State use, yet some of the commodity may be placed on the general market, making it fall under the public-account system.

Special agents of the bureau visited each institution, and practically all of the data were obtained from the several institutions or from contractors having work done therein under the contract or piece-price system. The States extended their official courtesy to the Federal

Government and complied with the request for information. In no instance was available information finally refused by the States. In some cases reports were prepared entirely by the institutions, but generally the bureau's agents did much or practically all of the work necessary in compiling the report from the available records. In a very few instances information as to the value of the goods produced was refused by contractors, making it necessary to make estimates of valuation based on inspection of the product and on such information as could be gathered in the general market.

Herewith five tables are presented.

TABLE 1.—The number of convicts or inmates, as now frequently called, varies of course during the year. The second section of this table shows the average number in each of four classes, namely, employed in productive labor, engaged in prison duties, sick, and idle. This classification varies as between institutions. When there is opportunity to provide labor for inmates, the number idle is reduced to as low a figure as possible and the number engaged in prison duties is reduced to the lowest number possible. However, if labor is not available, more inmates are put on routine prison duties and more become idle. The third section of Table 1 itemizes by system the average number of convicts employed at productive labor.

TABLE 2.—Records were much more satisfactory for goods sold than for goods produced. Often the two items were practically the same. Hence, figures are here given for goods sold that were produced under the public-account, piece-price, and contract systems. The table also gives the value of goods used in the same or other State institutions, that were produced under the State-use and piece-price and public works and ways systems.

The amount paid by contractors for the labor of convicts who were employed under the piece-price or the contract system is the amount received by the institution during the year. As sales do not necessarily coincide with payments for labor, the figures can not be put in absolute comparison with the figures for sales.

TABLE 3 summarizes by industry the details shown in Table 4.

TABLE 4 shows by institutions the industries operated under the State-use, public-account, piece-price, and contract systems, the average number of convicts employed in each industry, and the value of the goods produced.

With very slight exceptions, the table covers only goods that are consumed as distinguished from public works and ways construction or, in other words, public buildings and roads, for which see Table 5.

Some industries are seasonal and some were in operation less than a year. For such industries the number of convicts employed has been reduced to a full year equivalent. A subtotal is given for value of goods produced under the public-account, piece-price, and contract systems, which goods enter directly into the competitive market. The value of goods used by the State, produced under the State-use system, is given in a separate column.

TABLE 5 shows by States the average number of convicts employed under the public works and ways system and the value of the buildings or roads constructed by such convicts. The table shows as clearly as could be determined the value of the construction, including both material and labor, thus making the valuation figures on the same basis as the figures for goods produced under the other systems.

TABLE 1.—NUMBER OF CONVICTS AND AVERAGE NUMBER EMPLOYED AT PRODUCTIVE LABOR IN STATE AND FEDERAL PENITENTIARIES, BY SYSTEM AND STATE.

State.	Number of convicts in institutions.				Average number of convicts during year.					Average number of convicts at productive labor, by system under which employed.				
	At beginning of year.	Received during year.	Discharged during year.	At close of year.	Em- ployed at pro- ductive labor.	Engaged in prison duties.	Sick.	Idle.	Total.	State use.	Public works and ways.	Public account.	Piece price.	Contract.
Alabama.....	2,755	1,186	878	3,063	2,553	355	80	.....	2,988	534	264	276	.....	1,479
Arizona.....	399	200	210	389	56	306	12	12	383	19	34	3	.....	.....
Arkansas.....	1,283	1,051	1,037	1,307	1,053	153	89	.....	1,295	156	.....	897	.....	.....
California.....	3,760	2,001	1,768	3,993	2,641	1,066	127	77	3,841	1,095	613	833	.....	.....
Colorado.....	892	752	596	1,048	795	161	21	26	1,003	346	379	70	.....	.....
Connecticut.....	987	364	514	887	528	276	76	36	916	102	.....	73	353	.....
Delaware.....	332	919	888	363	245	93	6	6	350	28	.....	12	.....	205
District of Columbia.....	499	1,928	1,857	570	220	303	14	2	539	156	64	.....	.....	.....
Florida.....	1,368	1,577	1,534	1,411	1,028	383	15	.....	1,426	209	763	56	.....	.....
Georgia.....	3,547	1,463	1,356	3,654	3,698	82	42	.....	3,822	340	3,258	100	.....	.....
Idaho.....	266	155	136	285	42	60	3	175	280	27	.....	15	.....	.....
Illinois.....	4,469	1,778	1,781	4,466	2,331	1,821	70	28	4,450	816	677	1,038	.....	.....
Indiana.....	2,692	3,791	3,609	2,874	1,369	1,263	202	172	2,946	452	28	588	301	.....
Iowa.....	1,711	891	703	1,869	863	887	87	.....	1,851	530	100	233	.....	.....
Kansas.....	1,239	988	611	1,216	881	206	78	.....	1,225	618	63	200	.....	.....
Kentucky.....	2,061	968	987	2,042	1,695	288	51	9	2,043	155	.....	2	.....	1,538
Louisiana.....	1,672	673	767	1,578	1,110	447	39	.....	1,666	22	455	633	.....	.....
Maine.....	366	344	344	366	278	53	7	.....	338	18	12	161	.....	87
Maryland.....	1,326	1,470	1,280	1,516	1,212	265	12	6	1,495	60	9	6	.....	1,137
Massachusetts.....	1,760	2,631	2,335	2,056	966	858	86	54	1,904	638	.....	322	6	.....
Michigan.....	3,227	1,399	1,910	3,456	2,110	544	47	680	3,381	443	497	1,170	.....	.....
Minnesota.....	1,437	807	682	1,562	875	534	70	9	1,488	282	9	584	.....	.....
Mississippi.....	1,577	622	669	1,530	1,252	277	43	.....	1,572	251	.....	1,001	.....	.....
Missouri.....	2,807	2,444	2,361	2,890	1,813	830	58	127	2,828	556	4	1,253	.....	.....
Montana.....	350	231	250	331	119	215	5	1	340	74	44	1	.....	.....
Nebraska.....	791	289	286	794	627	168	10	.....	805	220	.....	107	300	.....
Nevada.....	141	113	80	174	30	55	3	59	147	26	.....	4	.....	.....
New Hampshire.....	146	37	53	130	100	23	14	1	138	2	.....	.....	.....	98
New Jersey.....	2,023	752	995	1,810	503	614	59	674	1,830	502	.....	.....	.....	1
New Mexico.....	358	520	502	376	193	168	20	18	399	.....	13	180	.....	.....
New York.....	7,115	4,207	4,744	6,578	2,395	3,524	285	308	6,512	2,943	152	121	.....	.....
North Carolina.....	1,053	307	255	1,105	935	94	71	2	1,102	255	559	89	.....	.....
North Dakota.....	1,163	213	140	1,236	122	73	10	15	1,220	33	.....	.....	.....	.....
Ohio.....	4,491	2,066	2,929	3,628	1,751	2,070	165	142	4,128	1,751	.....	.....	.....	.....
Oklahoma.....	2,157	1,511	1,516	2,152	1,271	702	53	25	2,051	340	82	419	430	.....

[702]

Oregon.....	453	223	200	386	163	182	7	72	494	70	54	430
Pennsylvania.....	4,462	1,703	2,004	4,163	987	1,715	42	1,592	4,336	783	13	
Rhode Island.....	594	1,472	1,530	436	329	216	12	13	570	82	6	
South Carolina.....	408	354	230	532	452	75	10		537	144	308	241
South Dakota.....	289	177	154	312	232	56	1	20	309	122	110	
Tennessee.....	1,655	1,418	1,359	1,709	1,359	176	156		1,691	254	220	885
Texas.....	3,156	1,901	1,462	3,595	2,749	600	125		3,474	740	2,000	
Utah.....	158	156	124	390	39	36	2	111	188	29	7	
Vermont.....	351	282	324	309	243	86	3	13	344	10	30	176
Virginia.....	1,170	1,041	778	1,439	857	561	21		1,439	21	116	170
Washington.....	1,108	751	703	1,066	302	420	14	358	1,094	286	7	
West Virginia.....	1,602	404	447	1,649	1,281	217	34	83	1,645	86	130	1,048
Wisconsin.....	1,139	604	628	1,175	782	358	32	16	1,188	170	17	
Wyoming.....	422	218	251	389	264	128	6	1	1,399	52	150	320
Total.....	78,203	50,844	49,942	79,105	47,799	24,103	2,495	4,933	79,350	16,157	13,519	6,083
FEDERAL.												
Georgia.....	2,334	1,847	1,548	2,633	2,066	309	71	33	2,479	2,050	16	
Kansas.....	2,671	1,482	1,647	2,506	1,270	1,077	29	78	2,454	541	729	
Washington.....	535	286	344	477	127	175	7	169	478	94	33	
Total.....	5,540	3,615	3,539	5,616	3,463	1,561	107	280	5,411	2,685	16	
Grand total.....	83,743	54,459	53,481	84,721	51,262	25,604	2,602	5,233	84,761	18,842	13,535	6,083

[703]

TABLE 2.—VALUE OF GOODS USED OR SOLD, CLASSIFIED BY SYSTEM UNDER WHICH PRODUCED IN STATE AND FEDERAL PENITENTIARIES, AND AMOUNT PAID FOR LABOR OF CONVICTS, BY STATE.

State.	Average number of convicts.	Average number of convicts employed at productive labor.	Value of goods used produced under—		Value of goods sold, by system under which produced.				Amount paid institution for labor of convicts.
			State-use system.	Public works and ways system.	Public account.	Piece price.	Contract.	Total.	
Alabama.....	2,988	2,553	\$199,486	\$1,112,872	\$837,778		\$4,262,361	\$5,100,139	\$1,021,136
Arizona.....	383	56	8,425	60,000	1,148			1,148	
Arkansas.....	1,295	1,053	44,732		255,891			255,891	
California.....	3,841	2,541	331,142	770,000	299,718			299,718	
Colorado.....	1,003	795	159,908	725,000	37,470			37,470	
Connecticut.....	916	528	75,012		38,004	\$2,308,103		2,346,107	125,040
Delaware.....	350	245	10,520		6,000		415,141	421,141	38,120
Dist. of Columbia.....	539	220	132,479	165,000					
Florida.....	1,426	1,025	120,372	2,038,318	41,106			41,106	
Georgia.....	3,822	3,698	41,643	5,030,350	12,195			12,195	
Idaho.....	280	42	13,738		6,307			6,307	
Illinois.....	4,450	2,531	555,296	500,000	265,431			265,431	
Indiana.....	2,946	1,369	426,880	30,000	740,661	504,418		1,245,079	117,043
Iowa.....	1,851	863	229,782	66,000	493,542			493,542	
Kansas.....	1,225	881	264,483	195,000	310,507			310,507	
Kentucky.....	2,043	1,695	119,911		6,063		6,835,246	6,841,309	417,785
Louisiana.....	1,596	1,110	43,407	53,291	294,485			294,485	
Maine.....	338	278	22,103	70,000	142,686		219,385	362,071	20,720
Maryland.....	1,495	1,212	87,130	4,740	2,850		2,676,423	2,679,273	324,903
Massachusetts.....	1,964	966	696,115		442,850	1,036		443,886	62
Michigan.....	3,381	2,110	619,215	190,365	2,778,433			2,778,433	
Minnesota.....	1,488	875	200,230	13,940	2,566,803			2,566,803	
Mississippi.....	1,572	1,252	172,477		583,642			583,642	
Missouri.....	2,828	1,813	733,094	2,184	1,195,420			1,195,420	
Montana.....	340	119	45,681	25,975	91			91	
Nebraska.....	805	627	64,371		97,764	482,439		580,203	89,225
Nevada.....	147	30	20,490		2,267			2,267	
New Hampshire.....	138	100	(1)				233,000	233,000	36,115
New Jersey.....	1,850	503	407,861		556		946	1,502	946
New Mexico.....	399	193		5,000	32,774			32,774	
New York.....	6,512	2,395	1,628,105	161,105	178			178	
North Carolina.....	1,102	935	120,658	1,455,176	62,399			62,399	
North Dakota.....	220	122	23,749		337,724			337,724	
Ohio.....	4,128	1,751	1,267,890						
Oklahoma.....	2,051	1,271	189,680	54,360	328,028	1,363,014		1,691,042	99,730
Oregon.....	424	163	79,004		45,050			45,050	
Pennsylvania.....	4,336	987	770,814	365,318	12,031			12,031	
Rhode Island.....	570	329	57,555		4,652	1,396,264		1,400,916	96,995
South Carolina.....	537	452	64,572		250,153			250,153	
South Dakota.....	309	232	49,242		167,267			167,267	
Tennessee.....	1,691	1,359	357,262		274,575	1,458,809		1,733,384	243,799
Texas.....	3,474	2,749	324,761		494,054			494,054	
Utah.....	188	39	9,791	75,000	2,056			2,056	
Vermont.....	344	243	8,265	10,000	8,250	664,313		672,563	34,349
Virginia.....	1,439	857	26,494	1,786,800	128,287		363,212	491,499	48,961
Washington.....	1,094	302	191,601	13,750	7,502			7,502	
West Virginia.....	1,645	1,281	85,635	196,000	20,504		2,578,448	2,598,952	225,892
Wisconsin.....	1,188	782	199,784	26,000	536,456	1,149,030	681,446	2,366,932	209,911
Wyoming.....	399	264	20,311		1,862	1,696,014		1,697,876	42,053
Total.....	79,350	47,799	11,321,156	15,201,544	14,173,470	11,023,440	18,265,608	43,462,518	3,183,835
FEDERAL.									
Georgia.....	2,479	2,066	2,006,951		16,693			16,693	
Kansas.....	2,454	1,270	218,887	65,056					
Washington.....	478	127	81,398	64,945					
Total.....	5,411	3,463	2,307,236	130,001	16,693			16,693	

1 Unable to obtain estimate.

TABLE 3.—SUMMARY OF VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AND AMOUNT PAID FOR HIRE OF CONVICTS, BY INDUSTRY.

State institutions.

Industry.	Average number of convicts employed.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for hire of convicts.
			Public account.	Piece price.	Contract.	Total.	
Bags, etc. (jute).....	788	\$214	\$293, 083			\$293, 083	
Baking, commercial.....	4	15, 454					
Baskets.....	100	7, 015	12, 780		\$16, 439	29, 219	\$9, 456
Box shooks (knocked down).....	96	11, 828	124, 685			124, 685	
Brick.....	896	329, 750	256, 800			256, 800	
Brooms and brushes.....	575	76, 301	271, 994		1, 255, 745	1, 527, 739	81, 618
Building construction.....	7		7, 000		1 55, 292	62, 292	1, 191
Clothing:							
Aprons.....	252			\$329, 365		329, 365	52, 080
Children's play suits.....	135			1, 149, 030		1, 149, 030	61, 229
Garment making, unclassified.....	325	261, 655	8, 330			8, 330	
Overalls and jumpers.....	771	156, 347	759, 038		71, 212	830, 250	9, 792
Pants (work).....	1, 505	4, 846		482, 439	3, 344, 206	3, 826, 645	381, 605
Shirts (work).....	3, 185	38, 415	227, 538	7, 087, 319	3, 523, 087	10, 837, 944	751, 581
Tailoring ¹	798	658, 046	117, 083			117, 083	
Coal mining.....	1, 965	244, 808	234, 303		3, 626, 313	3, 860, 616	933, 283
Coffee roasting.....	2	29, 040					
Coke making.....	23		47, 996			47, 996	
Farm, garden, dairy, and live stock.....	11, 824	3, 356, 057	2, 178, 905		* 4, 236	2, 183, 141	4, 236
Farm implements.....	163	1, 146	322, 045			322, 045	
Flags.....	15	5, 866	10, 331			10, 331	
Flax industry.....	35	322	30, 487			30, 487	
Furniture.....	3, 157	443, 148	1, 578, 645	* 122, 242	826, 750	2, 527, 637	120, 999
Granite and stonecutting, monumental.....	84		112, 766	59, 288		172, 054	11, 857
Handkerchiefs.....	12				15, 000	15, 000	2, 701
Harness.....	328		91, 000	190, 660	213, 210	494, 870	69, 565
Hollow ware.....	324	13, 819	142, 757		228, 752	371, 509	54, 615
Hosiery and underwear.....	1, 036	493, 714	17, 143	374, 606	681, 446	1, 073, 195	203, 065
Laundry.....	32	17, 900	9, 667			9, 667	
Leather findings.....	10		14, 500			14, 500	
Lime.....	39	14, 799	3, 043			3, 043	
Linens, etc., making and mending.....	1, 164	782, 148	66, 587			66, 587	
Lumber.....	224	68, 345	24, 397		636, 048	660, 445	87, 848
Mats, automobile.....	2		2, 393			2, 393	
Mattresses (cotton) and upholstering.....	85	62, 288	51, 725			51, 725	
Printing.....	521	295, 650	28, 604			28, 604	
Quarrying granite and stone, and rock crushing.....	1, 392	* 557, 986	* 175, 404			175, 404	
Repair and shop work, miscellaneous.....	839	424, 842	9, 118			9, 118	
Road building.....	69				7 31, 240	31, 240	21, 505
Rug and mat weaving.....	63	6, 662	304			304	
Sheet-metal work.....	74	47, 958					
Shoemaking.....	1, 898	707, 361	409, 225	664, 313	3, 582, 187	4, 655, 725	213, 857
Shoe repairing.....	187	150, 273	525			525	
Soap making.....	58	114, 577					
Stoves.....	184			564, 178		564, 178	89, 198
Sugar.....			* 128, 085			* 128, 085	
Tags, plates, signs, etc.....	568	1, 221, 369	* 1, 036			1, 036	
Textiles:							
Cloth, cotton and wool.....	1, 188	663, 973	19, 236			19, 236	
Duck, cotton.....	260	20, 347	828, 552			828, 552	
Tobacco manufacturing, chewing and smoking.....	13	13, 714					
Toys.....	22		13, 200			13, 200	
Traps, wire.....	17				31, 245	31, 245	4, 981
Twine and rope.....	1, 375	3, 173	5, 543, 160			5, 543, 160	
Whips.....	83				63, 200	63, 200	17, 568
Wood pulp.....	12				60, 000	60, 000	
Total.....	638, 784	11, 321, 156	14, 173, 470	11, 023, 440	18, 265, 608	43, 462, 518	3, 183, 835

¹ Working for private contractors erecting prison buildings.² Coats, pants, vests, and overcoats.³ Value of labor only.⁴ Chair caning.⁵ Includes sand and gravel, \$1,060.⁶ Includes pulverized stone for fertilizer, \$21,346.⁷ Value of labor working for private contractor.⁸ Sold from previous year's production.⁹ Includes \$865 sales to another State under competitive conditions.¹⁰ Not including 14 convicts making auto suits, not sold.

[705]

TABLE 3.—SUMMARY OF VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AND AMOUNT PAID FOR HIRE OF CONVICTS, BY INDUSTRY—Concluded.

Federal institutions.

Industry.	Average Number of convicts employed.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for hire of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brick.....	45	\$9,372					
Brooms and brushes.....	6	2,396					
Clothing:							
Garment making, unclassified.	8	9,164					
Overalls and jumpers.....	17	13,401					
Tailoring.....	112	80,651					
Work shirts.....	8	3,905					
Farm, garden, dairy, and live stock.....	298	133,957					
Furniture.....	16	7,932					
Linens, etc., making and mending.	36	21,449					
Printing.....	33	6,369					
Repair and shop work, miscellaneous.....	338	204,515					
Sand and gravel, unloaded.....	(¹¹)	495					
Shoemaking.....	57	41,519					
Shoe repairing.....	40	24,671					
Textiles:							
Duck.....	1,631	1,710,437					
Duck remnants and waste.....	16		\$16,693			\$16,693	
Underwear.....	12	12,881					
Wood, unloaded.....	28	24,322					
Total.....	2,701	2,307,236	16,693			16,693	

¹¹ Less than 1.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY.

Alabama—State prison (including nine prisons with headquarters at Montgomery)—Montgomery.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Clothing:							
Garment making, unclassified.	21	\$31,022					
Coal mining.....	1,334				\$3,626,313	\$3,626,313	\$933,288
Cotton mattresses.....	5	17,775					
Farm, garden, dairy, and live stock.....	508	105,376	\$9,226			9,226	
Linens, etc., making and mending.	16	24,966					
Lumber.....	145				1,636,048	1,636,048	87,848
Textiles:							
Duck, cotton.....	260	20,347	828,552			828,552	
Total.....	2,289	199,486	837,778		4,262,361	5,100,139	1,021,136

¹ Estimate.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Arizona—State prison—Florence.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts
			Public account.	Piece price.	Contract.	Total.	
Brooms.....	1	\$50					
Clothing:							
Garment making, unclassified.	1	695					
Tailoring.....	4	2,000					
Farm, garden, dairy, and live stock.....	10	2,548	\$1,148			\$1,148	
Linens, etc., making and mending.	1	300					
Shoemaking.....	5	2,832					
Total.....	22	8,425	1,148			1,148	

Arkansas—Penitentiary—Little Rock.

Clothing:							
Overalls and jumpers.....	11	\$2,839					
Farm, garden, dairy, and live stock.....	1,005	32,706	\$255,891			\$255,891	
Linens, etc., making and mending.	24	4,412					
Shoe repairing.....	13	4,775					
Total.....	1,053	44,732	255,891			255,891	

California—State prison—Folsom City.

Clothing:							
Garment making, unclassified.	13	\$7,286					
Tailoring.....	6	3,532					
Farm, garden, dairy, and live stock.....	115	23,592					
Linens, etc., making and mending.....	13	7,454					
Quarrying granite.....	241	90,157	\$4,930			\$4,930	
Repair and shop work, miscellaneous.....	50	27,795					
Shoemaking.....	16	6,933					
Shoe repairing.....	4	1,738					
Total.....	458	168,487	4,930			4,930	

California—State prison—San Quentin.

Bags, etc. (jute).....	788	\$214	\$293,083			\$293,083	
Clothing:							
Overalls, denim.....	15	3,615					
Shirts, cotton.....	15	12,505					
Tailoring.....	65	32,743	1,705			1,705	
Farm, garden, dairy, and live stock.....	83	14,386					
Flags.....	10	3,742					
Furniture.....	326	65,775					
Linens, etc., making and mending.....	20	4,295					
Repair and shop work, miscellaneous.....	12	2,814					
Rock, quarried and crushed.....	50	2,334					
Shoemaking.....	74	17,117					
Shoe repairing.....	12	3,115					
Total.....	1,470	162,655	294,788			294,788	

[707]

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Colorado—Reformatory—Buena Vista.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Farm, garden, dairy, and live stock.	103	\$39,061	\$24,510	.....	.....	\$24,510	.....
Linens, etc., making and mending.	37	12,620	.....	.....	.....	.....	.....
Shoe repairing.	12	7,500	.....	.....	.....	.....	.....
Total.....	152	59,181	24,510	.....	.....	24,510	.....

Colorado—State penitentiary—Canon City.

Clothing:							
Garment making, unclassified.	4	\$1,710	.....	.....	.....	.....	.....
Tailoring.	12	4,372	.....	.....	.....	.....	.....
Farm, garden, dairy, and live stock.	105	39,769	\$7,087	.....	.....	\$7,087	.....
Lime.	30	13,870	.....	.....	.....	.....	.....
Linens, etc., making and mending.	17	6,438	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.	10	4,890	.....	.....	.....	.....	.....
Rock, quarried and crushed.	64	21,066	5,873	.....	.....	5,873	.....
Shoemaking.	8	3,012	.....	.....	.....	.....	.....
Shoe repairing.	14	5,600	.....	.....	.....	.....	.....
Total.....	264	100,727	12,960	.....	.....	12,960	.....

Connecticut—Reformatory—Cheshire.

Farm, garden, dairy, and live stock.	40	\$14,876	.....	.....	.....	.....	.....
Printing.	20	.....	\$28,437	.....	.....	\$28,437	.....
Repair and shop work, miscellaneous.	45	.....	9,042	.....	.....	9,042	.....
Shoe repairing.	8	.....	525	.....	.....	525	.....
Tags, automobile.	30	43,961	.....	.....	.....	.....	.....
Total.....	143	58,837	38,004	.....	.....	38,004	.....

Connecticut—State farm for women—Niantic.

Farm, garden, dairy, and live stock.	21	\$10,940
--------------------------------------	----	----------	-------	-------	-------	-------	-------

Connecticut—State prison—Wethersfield.

Clothing:							
Men's work shirts.	353	.....	.....	\$2,308,103	.....	\$2,308,103	\$125,040
Farm, garden, dairy, and live stock.	11	\$5,235	.....	.....	.....	.....	.....
Total.....	364	5,235	.....	2,308,103	.....	2,308,103	125,040

Delaware—County workhouse—New Castle.

Clothing:							
Men's cotton work pants.	199	.....	.....	.....	\$413,480	\$413,480	\$36,459
Farm, garden, dairy, and live stock.	38	\$6,020	\$6,000	.....	¹ 1,661	7,661	1,661
Linens, etc., making and mending.	8	4,500	.....	.....	.....	.....	.....
Total.....	245	10,520	6,000	.....	415,141	421,141	38,120

¹ Estimate.

² Value of labor only.

[708]

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

District of Columbia—Reformatory—Lorton, Va.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brooms.....	2	\$2,333					
Farm, garden, dairy, and live stock	26	13,904					
Total.....	28	16,237					

District of Columbia—Workhouse—Occoquan, Va.

Brick.....	60	\$49,652					
Farm, garden, dairy, and live stock	54	59,410					
Linens, etc., making and mending.	1	250					
Lumber.....	10	6,270					
Sand and gravel.....	3	660					
Total.....	128	116,242					

Florida—State farm—Raiford.

Clothing:							
Garment making, unclassified.	2	\$362					
Farm, garden, dairy, and live stock	204	92,819	\$41,106			\$41,106	
Linens, etc., making and mending	33	4,737					
Repair and shop work, miscellaneous.	14	17,100					
Shoemaking.....	10	3,926					
Shoe repairing.....	2	1,428					
Total.....	265	120,372	41,106			41,106	

Georgia—State farm—Atlanta.

Farm, garden, dairy, and live stock	440	\$41,643	\$12,195			\$12,195	
-------------------------------------	-----	----------	----------	--	--	----------	--

Idaho—State Penitentiary—Boise.

Clothing:							
Garment making, unclassified.	2	\$931					
Tailoring.....	2	905					
Farm, garden, dairy, and live stock	23	7,740	\$2,881			\$2,881	
Linens, etc., making and mending	(*)	134					
Repair and shop work, miscellaneous.	(*)	600					
Shoemaking.....	15	3,410	3,426			3,426	
Shoe repairing.....	(*)	18					
Total.....	42	13,738	6,307			6,307	

Illinois—Women's prison—Joliet.

Farm, garden, dairy, and live stock	1	\$466					
Flags.....	1	539	\$60			\$60	
Laundry.....	5	17,000					
Linens, etc., making and mending	2	989					
Total.....	9	18,994	60			60	

* Less than 1.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Illinois—State penitentiary—Joliet.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Crushed stone.....	122	\$41,856					
Farm, garden, dairy, and livestock	94	40,669	\$122			\$122	
Furniture (hardwood).....	176	10,119	62,899			62,899	
Furniture (reed).....	181	273	74,760			74,760	
Repair and shop work, miscellaneous.....	9	2,072					
Shoemaking.....	76	73,513					
Total.....	658	168,502	137,781			137,781	

Illinois—Southern Illinois penitentiary—Menard.

Brick.....	25		\$6,845			\$6,845	
Crushed stone.....	309	\$8,000	60,031			60,031	
Farm, garden, dairy, and livestock	53	29,093					
Hosiery.....	40	80,032	3,500			3,500	
Linens, etc., making and mending	74	155,555					
Stone-dust fertilizer.....	91		20,000			20,000	
Total.....	592	272,680	90,376			90,376	

Illinois—State reformatory—Pontiac.

Clothing:							
Tailoring.....	10	\$6,225					
Farm, garden, dairy, and live stock	26	30,029					
Furniture (fiber).....	311		\$35,528			\$35,528	
Linens, etc., making and mending	65	10,962					
Printing and binding.....	113	29,511					
Shoemaking.....	32	5,739					
Total.....	557	82,406	35,528			35,528	

Illinois—State farm—Vandalia.

Farm, garden, dairy, and live stock.....	38	\$12,654	\$1,686			\$1,686	
--	----	----------	---------	--	--	---------	--

Indiana—Women's prison—Indianapolis.

Farm, garden, dairy, and live stock.....	15	\$5,081					
Laundry work.....	10		\$3,938			\$3,938	
Linens, etc., making and mending	30	1,771					
Rug weaving, novelty art work.....	2		213			213	
Total.....	57	6,852	4,201			4,201	

THE
PAGE
CON-

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Indiana—Reformatory—Jeffersonville.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brooms.....	8	\$5,969	\$1,691	.....	.....	\$1,691	.....
Farm, garden, dairy, and live stock.....	8	13,500	4,927	.....	.....	4,927	.....
Furniture (fiber chairs).....	112	.....	40,590	.....	.....	40,590	.....
Hollow ware.....	98	2,510	121,504	.....	.....	121,504	.....
Linens, etc., making and mending.....	9	14,628	.....	.....	.....	.....	.....
Printing.....	8	5,508	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	4	3,026	.....	.....	.....	.....	.....
Total.....	277	45,141	168,712	.....	.....	168,712	.....

Indiana—State prison—Michigan City.

Clothing:							
Shirts, work.....	291	\$7,321	\$121,815	\$323,924	.....	\$445,739	\$64,784
Tailoring.....	15	36,307	.....	.....	.....	.....	.....
Farm, garden, dairy, and live stock.....	21	20,631	8,200	.....	.....	8,200	.....
Furniture (reed).....	70	10,100	.....	121,206	.....	121,206	40,402
Hosiery.....	1	642	.....	.....	.....	.....	.....
Linens, etc., making and mending.....	7	2,273	.....	.....	.....	.....	.....
Monuments, stone.....	18	.....	.....	59,288	.....	59,288	11,857
Printing.....	3	700	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	9	6,106	.....	.....	.....	.....	.....
Road signs.....	54	103,466	.....	.....	.....	.....	.....
Shoemaking.....	50	27,643	51,110	.....	.....	51,110	.....
Tags, automobile.....	10	2,018	.....	.....	.....	.....	.....
Textiles:							
Cloth, cotton.....	13	3,200	.....	.....	.....	.....	.....
Tobacco manufacturing, chewing and smoking.....	7	11,214	.....	.....	.....	.....	.....
Twine, binder.....	149	.....	345,183	.....	.....	345,183	.....
Total.....	718	231,621	526,308	504,418	.....	1,030,726	117,043

Indiana—State farm—Putnamville.

Baskets (willow).....	46	\$498	\$12,780	.....	.....	\$12,780	.....
Brick and tile.....	92	51,400	7,709	.....	.....	7,709	.....
Brooms.....	1	605	65	.....	.....	65	.....
Coal mining.....	(³)	53	.....	.....	.....	.....	.....
Crushed stone.....	56	31,558	15,622	.....	.....	15,622	.....
Farm, garden, dairy, and live stock.....	87	51,158	43,980	.....	.....	43,980	.....
Lime and pulverized limestone.....	2	929	1,208	.....	.....	1,208	.....
Linens, etc., making and mending.....	4	6,863	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	1	202	76	.....	.....	76	.....
Total.....	289	143,266	41,440	.....	.....	41,440	.....

³ Less than 1.⁴ Includes \$62.85 for ice, and \$22.19 for lumber.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Iowa—Men's reformatory—Anamosa.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Clothing:							
Garment making, unclassified.	10	\$3,432					
Overalls, denim.	10	2,587					
Unionalls.	10	3,174					
Tailoring.	31	10,400					
Farm, garden, dairy, and live stock.	186	70,811	\$19,559			\$19,559	
Linens, etc., making and mending.	27	8,970					
Printing.	48	14,357					
Repair and shop work, miscellaneous.	53	18,900					
Shoemaking.	32	5,008					
Shoe repairing.	10	1,584					
Total.	417	139,223	19,559			19,559	

Iowa—State penitentiary—Fort Madison.

Clothing:							
Garment making, unclassified.	1	\$1,970					
Tailoring.	3	7,065					
Farm, garden, dairy, and live stock.	58	47,970	\$12,076			\$12,076	
Furniture (chairs).	194		461,231			461,231	
Linens, etc., making and mending.	4	7,690					
Repair and shop work, miscellaneous.	10	6,000					
Shoemaking.	1	3,248					
Shoe repairing.	2	3,400					
Total.	273	77,343	473,307			473,307	

Iowa—Women's reformatory—Rockwell City.

Clothing:							
Garment making, unclassified.	7	\$437					
Farm, garden, dairy, and live stock.	33	10,597	\$676			\$676	
Linens, etc., making and mending.	33	2,182					
Total.	73	13,216	676			676	

Kansas—State industrial farm—Lansing.

Farm, garden, dairy, and live stock.	89	\$15,260	\$1,447			\$1,447	
Linens, etc., making and mending.	10	2,151					
Total.	99	17,411	1,447			1,447	

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Kansas—State penitentiary—Lansing.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brick.....	104	\$35,000					
Clothing:							
Garment making, unclassified.	16	10,146					
Tailoring.....	15	9,846					
Coal mining.....	352	143,053	\$49,599			\$49,599	
Farm, garden, dairy, and live stock.....	101	30,184					
Linens, etc., making and mending.	24	15,304					
Shoe repairing.....	6	3,539					
Twine.....	101		259,461			259,461	
Total.....	719	247,072	309,060			309,060	

Kentucky—State penitentiary—Eddyville.

Brooms.....	65				\$474,560	\$474,560	\$22,209
Clothing:							
Shirts, work.....	230				\$629,161	\$629,161	52,209
Farm, garden, dairy, and live stock.....	6	\$14,250	\$6,063			6,063	
Harness (collars).....	93				213,210	213,210	30,427
Linens, etc., making and mending.	16	10,000					
Repair and shop work, miscellaneous.....	13	10,000					
Total.....	423	34,250	6,063		1,316,931	1,322,994	104,845

Kentucky—State reformatory—Frankfort.

Brooms.....	72				\$370,800	\$370,800	\$20,275
Clothing:							
Overalls and jumpers.....	30	\$21,002					
Shirts.....	404	16,375			\$1,336,880	\$1,336,880	109,663
Farm, garden, dairy, and live stock.....	7	6,800					
Furniture (wicker and reed chairs).....	177				503,750	503,750	36,509
Linens, etc., making and mending.	61	41,484					
Shoemaking.....	521				3,306,885	3,306,885	146,493
Total.....	1,272	85,661			5,518,315	5,518,315	312,940

Louisiana—State penitentiary—Baton Rouge.⁶

Farm, garden, dairy, and live stock.....	633		\$166,400			\$166,400	
Linens, etc., making and mending.....	15	\$24,762					
Shoemaking.....	7	18,645					
Sugar.....			7 128,085			7 128,085	
Total.....	655	43,407	294,485			294,485	

¹ Estimate.

² Includes \$542,224, estimate.

³ Headquarters of convict department. Convicts are distributed throughout the State on prison farms.

⁷ Sugar mill did not operate. This sugar sold from 1921 stock on hand.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Maine—State reformatory for women—Skowhegan.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Farm, garden, dairy, and live stock	2	\$6,733	\$319			\$319	
Linens, etc., making and mending	46		229			229	
Total	48	6,733	548			548	

Maine—State prison—Thomaston.

Brooms	75				\$159,385	\$159,385	\$20,720
Farm, garden, dairy, and live stock	12	\$12,000	\$10,554			10,554	
Farm implements	54		29,970			29,970	
Harness	42		91,000			91,000	
Total	183	12,000	131,524		159,385	290,909	20,720

Maine—State reformatory for men—South Windham.

Building construction	3		\$7,000			\$7,000	
Farms, garden, dairy, and live stock	20	\$3,370	3,614			3,614	
Wood-pulp manufacturing	12				\$60,000	60,000	(⁹)
Total	35	3,370	10,614		\$60,000	70,614	

Maryland—Maryland penitentiary—Baltimore.

Building construction	4				¹⁰ \$55,292	¹⁰ \$55,292	\$1,191
Clothing:							
Men's cotton work pants	306				1,050,524	1,050,524	86,923
Men's cotton work shirts	87				¹¹ 275,000	¹¹ 275,000	24,558
Furniture (wood)	28				¹² 190,000	¹² 190,000	7,911
Hollow ware	192				228,752	228,752	54,615
Linens, etc., making and mending	4	\$16,000					
Printing	11	14,962					
Road building	33				¹¹ 16,362	¹¹ 16,362	11,518
Shoemaking	125	16,927			¹² 275,302	¹² 275,302	33,015
Tags, automobile	9	22,967					
Total	799	70,856			1,991,232	1,991,232	219,731

¹ Estimate.

² The company does not hold a contract for the labor. When in need of help, the company requests the superintendent of the reformatory that a certain number of men be sent him, who receive prevailing wages paid other employees. The institution merely deducts the per capita cost of maintenance, and the balance is given to inmate's dependent family.

³ Amount not reported.

⁴ Working for private contractors erecting prison buildings.

⁵ Amount paid by contractor to institution and inmates.

⁶ Includes estimates on boys' shoes at \$58,000.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Maryland—House of correction—Jessups.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Baskets.....	33				\$16,439	\$16,439	\$9,456
Clothing:							
Mens' cotton work pants.....	149				¹ 366,000	¹ 366,000	42,227
Mens' cotton work shirts.....	122				¹ 240,000	¹ 240,000	34,191
Farm, garden, dairy, and live stock.....	35	\$16,274	\$2,850		¹³ 1,667	4,517	1,667
Ladies' handkerchiefs.....	12				15,000	15,000	2,701
Road building.....	36				¹⁴ 14,840	¹⁴ 14,840	9,949
Traps, wire.....	17				31,245	31,245	4,981
Total.....	404	16,274	2,850		685,191	688,041	105,172

Massachusetts—State farm—Bridgewater.

Farm, garden, dairy, and live stock.....	151	\$113,705	\$8,028			\$8,028	
--	-----	-----------	---------	--	--	---------	--

Massachusetts—State prison—Charlestown (Boston).

Brooms and brushes.....	47	\$6,678	\$35,230			\$35,230	
Clothing:							
Garment making, unclassified.....	10	12,379	1,422			1,422	
Tailoring.....	75	73,294	15,197			15,197	
Hosiery.....	42	41,719	9,728			9,728	
Linens, etc., making and mending.....	2	884	200			200	
Mattress making and upholstering.....	21	8,549	51,725			51,725	
Metal and aluminum ware.....	27	8,200	12,891			12,891	
Shoemaking.....	140	47,874	146,130			146,130	
Tags, automobile and motorcycle.....	40	103,236					
Total.....	404	302,813	272,523			272,523	

Massachusetts—Reformatory—Concord Junction.

Farm, garden, dairy, and live stock.....	44	\$20,722					
Furniture.....	55	25,246	\$41,105			\$41,105	
Chair caning.....	6			\$1,036		1,036	\$62
Lumber.....	6	2,980					
Printing.....	1		167			167	
Repair and shop work, miscellaneous.....	1	923					
Textiles ¹⁵	202	134,894	19,236			19,236	
Total.....	315	184,765	60,508	1,036		61,544	62

¹ Estimate.¹³ Money paid for labor of convicts on farm work.¹⁴ Value of labor working for private contractor.¹⁵ Cotton yarn was spun by inmates.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Massachusetts—Women's reformatory—Sherborn.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Clothing:							
Garment making, unclassified	4	\$10,192	\$6,908	.....	.....	\$6,908	.....
Tailoring.....	1	1,516	71	.....	.....	71	.....
Farm, garden, dairy, and live stock	13	31,765	2,099	.....	.....	2,099	.....
Flags.....	4	1,585	10,271	.....	.....	10,271	.....
Hosiery.....	11	13,014	3,915	.....	.....	3,915	.....
Linen, etc., making and mending..	23	12,590	65,977	.....	.....	65,977	.....
Total.....	56	70,662	89,241	.....	.....	89,241	.....

Massachusetts—Prison camp—West Rutland.

Farm, garden, dairy, and livestock	36	\$21,008	\$12,550	.....	.....	\$12,550	.....
Lumber.....	3	2,762	.....	.....	.....	.....	.....
Sand and gravel.....	1	400	.....	.....	.....	.....	.....
Total.....	40	24,170	12,550	.....	.....	12,550	.....

Michigan—Reformatory—Ionia.

Clothing:							
Garment making, unclassified.	25	\$34,299	.....	.....	.....	.....	.....
Farm, garden, dairy, and live stock.	86	45,815	.....	.....	.....	.....	.....
Furniture (reed chairs, etc.).....	318	.....	\$166,094	.....	.....	\$166,094	.....
Mats, automobile.....	2	.....	2,393	.....	.....	2,393	.....
Repair and shop work, miscellaneous.	17	6,768	.....	.....	.....	.....	.....
Shoemaking.....	29	21,075	562	.....	.....	562	.....
Soap making.....	10	29,595	.....	.....	.....	.....	.....
Toys.....	22	.....	13,200	.....	.....	13,200	.....
Total.....	509	137,552	182,249	.....	.....	182,249	.....

Michigan—State prison—Jackson.

Brick.....	107	\$4,100	\$144,210	.....	.....	\$144,210	.....
Brushes.....	14	1,622	10,401	.....	.....	10,401	.....
Clothing:							
Overalls and jumpers.....	7	81,981	.....	.....	.....	.....	.....
Tailoring.....	1	12,254	.....	.....	.....	.....	.....
Farm, garden, dairy, and live stock	127	150,567	115,748	.....	.....	115,748	.....
Farm implements.....	5	285	815	.....	.....	815	.....
Furniture (reed chairs).....	158	.....	312,841	.....	.....	312,841	.....
Hollow ware.....	7	3,109	8,362	.....	.....	8,362	.....
Linens, etc., making and mending.	1	13,057	.....	.....	.....	.....	.....
Monuments, memorial.....	43	.....	102,125	.....	.....	102,125	.....
Printing.....	10	6,191	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.	20	14,793	.....	.....	.....	.....	.....
Tags, automobile.....	31	87,977	¹⁰ 865	.....	.....	865	.....
Textiles:							
Cotton cloth.....	16	4,897	.....	.....	.....	.....	.....
Twine.....	276	496	1,506,925	.....	.....	1,506,925	.....
Total.....	823	381,320	2,202,292	.....	.....	2,202,292	.....

¹⁰ Sales to another State under competitive conditions.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Michigan—State house of correction and branch prison—Marquette.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Box shooks (knocked down).....	96	\$11,828	\$124,685			\$124,685	
Clothing:							
Garment making, unclassified.	4	1,279					
Overalls and jumpers.....	103	17,037	244,810			244,810	
Tailoring.....	6	2,116					
Farm, garden, dairy, and live stock ¹⁷	33	13,269					
Linens, etc., making and mending.	4	1,441					
Lumber.....	35	53,364	24,397			24,397	
Total.....	281	100,334	393,892			393,892	

Minnesota—State reformatory for men—St. Cloud.

Clothing:							
Garment making, unclassified.	12	\$10,804					
Tailoring.....	41	28,208					
Crushed rock.....	91	43,995					
Farm, garden, dairy, and live stock.....	61	31,011	\$2,367			\$2,367	
Linens, etc., making and mending.....	9	8,532					
Repair and shop work, miscellaneous.....	8	11,439					
Total.....	222	133,989	2,367			2,367	

Minnesota—State reformatory for women—Shakopee.

Clothing:							
Garment making, unclassified.	2	\$525					
Tailoring.....	1	1,019					
Farm, garden, dairy, and live stock.....	6	4,358	\$504			\$504	
Linens, etc., making and mending.	6	2,182					
Total.....	15	8,084	504			504	

Minnesota—State prison—Stillwater.

Clothing:							
Garment making, unclassified.	4	\$3,643					
Tailoring.....	2	3,021					
Farm, garden, dairy, and live stock.....	31	40,659	\$1,013			\$1,013	
Farm implements.....	92		291,260			291,260	
Linens, etc., making and mending.	2	4,304					
Printing.....	11	6,530					
Twine (binder).....	487		2,271,659			2,271,659	
Total.....	629	58,157	2,563,932			2,563,932	

¹⁷ Includes \$225 worth of ice.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Mississippi—State penitentiary—Jackson.⁶

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brick.....	5		\$1,090			\$1,090	
Clothing:							
Garment making, unclassified.	1	\$949					
Farm, garden, dairy, and live stock.....	1,219	138,749	581,206			581,206	
Limestone (agricultural).....	3		1,346			1,346	
Linens, etc., making and mending.....	24	32,779					
Total.....	1,252	172,477	583,642			583,642	

Missouri—Reformatory—Boonville.

Brick.....	50	\$4,567	\$8,363			\$8,363	
Clothing:							
Overalls and jumpers.....	10	4,621					
Farm, garden, dairy, and live stock.....	84	92,689	14,062			14,062	
Linens, etc., making and mending.....	5	1,928					
Printing.....	16	25,496					
Repair and shop work, miscellaneous.....	24	14,000					
Rock, quarried and crushed.....	103	206,389	15,185			15,185	
Shoemaking.....	10	4,469					
Shoe repairing.....	1	963					
Total.....	303	445,122	37,610			37,610	

Missouri—State penitentiary—Jefferson City.

Brooms.....	89		\$224,552			\$224,552	
Clothing:							
Garment making, unclassified.	7	\$10,526					
Jumpers.....	83		87,487			87,487	
Overalls.....	390		426,741			426,741	
Shirts, chambray.....	259		93,476			93,476	
Shirts, flannel.....	57		12,247			12,247	
Tailoring (pants).....	149		100,110			100,110	
Farm, garden, dairy, and live stock.....	234	214,955	1,101			1,101	
Leather findings.....	10		14,500			14,500	
Linens, etc., making and mending.....	13	14,850					
Repair and shop work, miscellaneous.....	18	20,870					
Shoemaking.....	149	1,991	179,923			179,923	
Shoe repairing.....	25	24,780					
Twine and rope.....	9		17,673			17,673	
Total.....	1,492	287,972	1,157,810			1,157,810	

⁶ Headquarters of convict bureau. Convicts are distributed throughout the State on prison farms.

¹⁸ Four convicts produced State-use ice valued at \$1,687.30.

¹⁹ Not including 14 convicts making auto suits, not sold.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Montana—State prison—Deer Lodge.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brick.....	5	\$18,750					
Brooms.....	8	570					
Clothing:							
Tailoring.....	7	5,500					
Farm, garden, dairy, and live stock.....	29	17,892					
Lumber.....	25	2,969					
Rugs.....	1		\$91			\$91	
Total.....	75	45,681	91			91	

Nebraska—State penitentiary—Lincoln.

Clothing:							
Men's cotton work shirts.....	300			\$482,439		\$482,439	\$89,225
Farm, garden, dairy, and live stock.....	59	\$21,353	\$2,473			2,473	
Furniture (chairs).....	80		88,294			88,294	
Linens, etc., making and mending.....	11	6,441					
Shoe repairing.....	3	3,500					
Total.....	453	31,294	90,767	482,439		573,206	89,225

Nebraska—State reformatory for men—Lincoln.

Clothing:							
Garment making, unclassified.....	15	\$1,106					
Farm, garden, dairy, and live stock.....	80	19,859	\$5,861			\$5,861	
Linens, etc., making and mending.....	45	3,311					
Repair and shop work, miscellaneous.....	5	2,500					
Shoe repairing.....	10	1,249					
Total.....	155	28,025	5,861			5,861	

Nebraska—State reformatory for women—York.

Farm, garden, dairy, and live stock.....	13	\$4,498	\$1,136			\$1,136	
Linens, etc., making and mending.....	6	554					
Total.....	19	5,052	1,136			1,136	

Nevada—State prison—Carson City.

Farm, garden, dairy, and live stock.....	16	\$10,655	\$2,267			\$2,267	
Linens, etc., making and mending.....	1	60					
Repair and shop work, miscellaneous.....	12	9,500					
Shoe repairing.....	1	275					
Total.....	30	20,490	2,267			2,267	

[719]

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

New Hampshire—State prison—Concord.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Farm, garden, dairy, and live stock.....	2	(²⁰)					
Furniture (wood).....	98				²¹ \$233,000	²¹ \$233,000	\$36, 115
Total.....	100				233,000	233,000	36, 115

New Jersey—Reformatory for women—Clinton.

Farm, garden, dairy, and live stock.....	28	\$19, 075	\$166			\$166	
Linens, making and mending.....	24	3, 051					
Total.....	52	22, 126	166			166	

New Jersey—Reformatory—Rahway.

Clothing:							
Garment making, unclassified	1	\$533					
Tailoring.....	20	9, 462					
Farm, garden, dairy, and live stock.....	44	39, 438			²² \$908	²² \$908	\$908
Furniture.....	6	6, 922					
Linens, etc., making and mending.....	3	1, 642					
Printing.....	15	22, 822					
Repair and shop work, miscellaneous.....	8	1, 523					
Road repairing.....	(²³)				²² 38	²² 38	38
Shoemaking.....	14	5, 379					
Total.....	111	87, 721			²² 946	²² 946	946

New Jersey—State prison—Trenton.

Baking, commercial.....	4	\$14, 554					
Clothing:							
Garment making, unclassified	2	2, 171					
Tailoring.....	9	11, 190					
Farm, garden, dairy, and live stock.....	146	26, 539	\$390			\$390	
Linens, etc., making and mending.....	1	1, 123					
Printing.....	62	61, 821					
Repair and shop work, miscellaneous.....	25	13, 132					
Shoemaking.....	33	57, 211					
Shoe repairing.....	18	12, 904					
Tags, automobile.....	40	97, 369					
Total.....	340	298, 014	390			390	

¹⁹ Less than 1.

²⁰ Unable to get any estimate.

²¹ \$15,000 sold from previous year's production, balance estimated.

²² This amount represents what institution received for hire of convicts and does not represent value of product. Farmers in the neighborhood when in need of help and unable to obtain it otherwise call on institution for some men to do the work.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

New Mexico—State penitentiary—Santa Fe.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brick and tile.....	173	.....	\$30,939	.....	.....	\$30,939	.....
Lime.....	7	.....	1,835	.....	.....	1,835	.....
Total.....	180	.....	\$32,774	.....	.....	\$32,774	.....

New York—State training school—Albion.

Farm, garden, dairy, and live stock.....	15	\$8,146	.....	.....	.....	.....	.....
Linens, etc., making and mending.....	24	3,440	.....	.....	.....	.....	.....
Total.....	39	11,586	.....	.....	.....	.....	.....

New York—State prison for women—Auburn.

Farm, garden, dairy, and live stock.....	9	\$500	.....	.....	.....	.....	.....
Linens, etc., making and mending.....	20	4,362	.....	.....	.....	.....	.....
Mattresses (cotton) and upholstering.....	4	2,758	.....	.....	.....	.....	.....
Total.....	42	7,620	.....	.....	.....	.....	.....

New York—State prison—Auburn.

Baskets, willow.....	21	\$6,517	.....	.....	.....	.....	.....
Brooms.....	60	18,423	.....	.....	.....	.....	.....
Clothing:			.....	.....	.....	.....	.....
Tailoring.....	38	12,732	.....	.....	.....	.....	.....
Farm, garden, dairy, and live stock.....	16	20,927	.....	.....	.....	.....	.....
Furniture (wood and iron).....	246	210,382	.....	.....	.....	.....	.....
Linens, etc., making and mending.....	1	363	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	59	13,769	.....	.....	.....	.....	.....
Shoemaking.....	7	2,373	.....	.....	.....	.....	.....
Tags, automobile.....	83	198,740	.....	.....	.....	.....	.....
Textiles.....	172	163,745	.....	.....	.....	.....	.....
Total.....	703	647,971	.....	.....	.....	.....	.....

New York—Reformatory for women—Bedford.

Farm, garden, dairy, and live stock.....	60	\$9,595	.....	.....	.....	.....	.....
Linens, etc., making and mending.....	56	7,871	.....	.....	.....	.....	.....
Total.....	116	17,466	.....	.....	.....	.....	.....

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

New York—Great Meadow prison—Comstock.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Clothing:							
Tailoring.....	24	\$19,048					
Crushed stone.....	25	5,074					
Farm, garden, dairy, and live stock.....	36	22,351					
Hosiery.....	1	423					
Mats, coir, and chain.....	60	6,662					
Shoemaking.....	7	1,667					
Shoe repairing.....	5	1,000					
Total.....	158	56,225					

New York—Clinton prison—Dannemora.

Clothing:							
Garment making, unclassified.	8	\$11,280					
Tailoring.....	37	52,174					
Farm, garden, dairy, and live stock.....	11	16,150					
Linens, etc., making and mending.	7	10,614					
Repair and shop work, miscellaneous.....	27	14,977					
Textiles.....	350	167,232					
Total.....	440	262,427					

New York—State reformatory—Elmira.

Brooms and brushes.....	5	\$1,033					
Clothing:							
Garment making, unclassified.	7	2,886					
Tailoring.....	17	6,964					
Coffee roasting.....	2	29,040					
Farm, garden, dairy, and live stock.....	24	19,594	\$178			\$178	
Linens, etc., making and mending.	11	4,377					
Printing.....	33	7,483					
Repair and shop work, miscellaneous.....	73	3,233					
Shoemaking.....	30	5,204					
Soap making.....	23	612					
Total.....	225	80,426	178			178	

New York—Institution for defective delinquents—Napanoch.

Farm, garden, dairy, and live stock.....	36	\$6,768					
Linens, etc., making and mending.	41	15,649					
Shoemaking.....	10	2,829					
Total.....	87	25,246					

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

New York—Sing Sing prison—Ossining.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brooms and brushes.....	26	\$21,523	.....	.....	.....	.....	.....
Clothing:							
Tailoring.....	22	40,029	.....	.....	.....	.....	.....
Hosiery and underwear.....	171	263,444	.....	.....	.....	.....	.....
Linens, etc., making and mending.....	4	6,844	.....	.....	.....	.....	.....
Mattresses(cotton)and upholstery.....	20	16,784	.....	.....	.....	.....	.....
Printing.....	22	13,672	.....	.....	.....	.....	.....
Sheet-metal work.....	74	47,958	.....	.....	.....	.....	.....
Shoemaking.....	94	108,884	.....	.....	.....	.....	.....
Total.....	433	519,138	.....	.....	.....	.....	.....

North Carolina—State prison—Raleigh.

Clothing:							
Garment making, unclassified.....	17	\$4,500	.....	.....	.....	.....	.....
Overalls and jumpers.....	18	4,800	.....	.....	.....	.....	.....
Shirts.....	12	2,214	.....	.....	.....	.....	.....
Farm, garden, dairy, and live stock.....	329	100,864	\$62,399	.....	.....	\$62,399	.....
Repair and shop work, miscellaneous.....	6	3,000	.....	.....	.....	.....	.....
Tags, automobile; signs for highway commission.....	3	5,280	.....	.....	.....	.....	.....
Total.....	376	120,658	62,399	.....	.....	62,399	.....

North Dakota—State penitentiary—(Grove) Bismarck.

Brick.....	3	.....	\$3,796	.....	.....	\$3,796	.....
Farm, garden, dairy, and live stock.....	36	\$23,749	1,343	.....	.....	1,343	.....
Twine and rope.....	83	.....	332,585	.....	.....	332,585	.....
Total.....	122	23,749	337,724	.....	.....	337,724	.....

Ohio—State penitentiary (including State farm at London and State brick plant)—Columbus.

Brick.....	169	\$159,684	.....	.....	.....	.....	.....
Clothing:							
Garment making, unclassified.....	39	43,736	.....	.....	.....	.....	.....
Farm, garden, dairy, and live stock.....	291	114,882	.....	.....	.....	.....	.....
Hosiery and underwear.....	99	57,268	.....	.....	.....	.....	.....
Linens, etc., making and mending.....	8	9,268	.....	.....	.....	.....	.....
Mattresses(cotton)and upholstery.....	24	10,790	.....	.....	.....	.....	.....
Printing.....	13	3,848	.....	.....	.....	.....	.....
Quarrying stone.....	18	13,444	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	81	52,230	.....	.....	.....	.....	.....
Shoemaking.....	11	6,261	.....	.....	.....	.....	.....
Shoe repairing.....	2	1,126	.....	.....	.....	.....	.....
Soap making.....	24	80,870	.....	.....	.....	.....	.....
Tags, automobile.....	80	109,926	.....	.....	.....	.....	.....
Textiles ¹⁵	280	104,089	.....	.....	.....	.....	.....
Total.....	1,139	767,422	.....	.....	.....	.....	.....

¹⁵ Cotton yarn was spun by inmates.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Ohio—State reformatory—Mansfield.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Clothing:							
Garment making, unclassified.	5	\$9,518					
Tailoring	103	202,799					
Farm, garden, dairy, and live stock.	100	74,597					
Furniture (wood)	227	108,287					
Linens, etc., making and mending	6	13,015					
Printing	65	28,593					
Repair and shop work, miscellaneous.	38	5,168					
Shoemaking	68	58,491					
Total	612	500,468					

Oklahoma—State penitentiary—McAlester.

Brick	80	\$3,763	\$43,258			\$43,258	
Brooms	5	1,770					
Clothing:							
Garment making, unclassified.	3	330					
Men's denim work shirts	430		\$1,363,014			1,363,014	\$99,780
Overalls and jumpers	10	6,751					
Pants, work	9	4,846					
Tailoring	15	9,605					
Farm, garden, dairy, and live stock.	196	56,956	61,548			61,548	
Farm implements (wagons)	12	861					
Linens, etc., making and mending	20	5,079					
Mattresses and pillows	7	3,522					
Repair and shop work, miscellaneous.	7	7,389					
Shoe making	16	13,197					
Tags, automobile	20	41,671					
Twine and rope	90	2,001	177,527			177,527	
Underwear	10	1,261					
Total	930	159,002	282,333	1,363,014		1,645,347	99,780

Oklahoma—State reformatory—Granite.

Clothing:							
Garment making, unclassified.	21	\$10,440					
Crushed granite	180		\$28,187			\$28,187	
Farm, garden, dairy, and live stock.	50	18,021	17,508			17,508	
Shoemaking	8	2,217					
Total	259	30,678	45,695			45,695	

Oregon—State penitentiary—Salem.

Brick	15	\$1,934	\$9,245			\$9,245	
Clothing:							
Garment making, unclassified.	3	2,836					
Tailoring	6	7,000					
Farm, garden, dairy, and live stock	35	49,652					
Flax industry	35	322	30,487			30,487	
Furniture	58	3,310	5,318			5,318	
Linens, etc., making and mending	2	2,800					
Repair and shop work, miscellaneous	4	5,000					
Shoemaking	5	6,150					
Total	163	79,004	45,050			45,050	

¹ Estimate.

[724]

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Pennsylvania—Industrial reformatory—Huntingdon.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Farm, garden, dairy, and live stock.....	54	\$18,000					
Linens, etc., making and mending.....	5	2,500					
Printing.....	8	6,000					
Repair and shop work, miscellaneous.....	10	5,371					
Shoemaking.....	2	1,000					
Tags, automobile.....	90	306,396					
Total.....	169	339,267					

Pennsylvania—Muncy Farm (formerly State Industrial Home)—Muncy.

Clothing:							
Garment making, unclassified.....	11	\$542					
Tailoring.....	1	36					
Farm, garden, dairy, and live stock.....	36	9,263	\$524			\$524	
Linens, etc., making and mending.....	18	888					
Total.....	66	10,729	524			524	

Pennsylvania—Penitentiary for eastern district of Pennsylvania—Philadelphia.

Hosiery and underwear.....	85	\$35,911					
Linens, etc., making and mending.....	21	15,000					
Printing.....	24	12,172					
Repair and shop work, miscellaneous.....	6	3,611					
Shoemaking.....	66	102,107					
Textiles.....	40	40,365					
Tobacco, chewing and smoking.....	6	2,500					
Total.....	248	211,666					

Pennsylvania—State penitentiary for the western district of Pennsylvania—Pittsburgh.

Brooms and brushes.....	10	\$15,060					
Farm, garden, dairy, and live stock.....	151	77,144	\$11,507			\$11,507	
Linens, etc., making and mending.....	32	58,397					
Printing.....	3	2,000					
Repair and shop work, miscellaneous.....	2	1,000					
Textiles.....	115	55,551					
Total.....	313	209,152	11,507			11,507	

Rhode Island—State prison and Providence County jail—Howard.

Clothing:							
Men's work shirts.....	241		\$1,396,264		\$1,396,264		\$96,995
Farm, garden, dairy, and live stock.....	40	\$25,706					
Printing.....	4	2,700					
Total.....	285	28,406	1,396,264		1,396,264		96,995

¹ Estimate.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Rhode Island—Workhouse and house of correction—Howard.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Farm, garden, dairy, and live stock.....	44	\$29, 149	\$4, 652	.....	.....	\$4, 652	.....

South Carolina—Penitentiary—Columbia.

Clothing:							
Garment making, unclassified	20	\$5, 218	.....	.....	.....	.....	.....
Overalls and jumpers.....	40	7, 940	.....	.....	.....	.....	.....
Farm, garden, dairy, and live stock.....	134	47, 814	\$35, 783	.....	.....	\$35, 783	.....
Furniture.....	249	.....	214, 370	.....	.....	214, 370	.....
Shoe repairing.....	9	3, 600	.....	.....	.....	.....	.....
Total.....	452	64, 572	250, 153	.....	.....	250, 153	.....

South Dakota—State penitentiary—Sioux Falls.

Farm, garden, dairy, and live stock.....	115	\$39, 643	\$9, 366	.....	.....	\$9, 366	.....
Linen, etc., making and mending.....	18	6, 099	.....	.....	.....	.....	.....
Shoe repairing.....	4	3, 500	.....	.....	.....	.....	.....
Twine and rope.....	95	.....	157, 901	.....	.....	157, 901	.....
Total.....	232	49, 242	167, 267	.....	.....	167, 267	.....

Tennessee—State penitentiary—Nashville.

Clothing:							
Aprons (for house use).....	252	.....	.....	1 \$329, 365	.....	1 \$329, 365	\$52, 080
Farm, garden, dairy, and live stock.....	58	\$132, 725	\$41, 875	.....	.....	41, 875	.....
Harness (complete sets).....	193	.....	.....	190, 660	.....	190, 660	39, 135
Hosiery.....	256	.....	.....	374, 606	.....	374, 606	63, 383
Linen, etc., making and mending.....	19	22, 160	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	3	11, 500	.....	.....	.....	.....	.....
Shoe repairing.....	20	60, 175	.....	.....	.....	.....	.....
Stoves.....	184	.....	.....	504, 178	.....	504, 178	89, 106
Total.....	985	226, 560	41, 875	1, 458, 809	.....	1, 500, 684	243, 799

Tennessee—Brushy Mountain penitentiary—Petros.

Coal mining.....	265	\$85, 702	\$184, 704	.....	.....	\$184, 704	.....
Coke making.....	23	.....	47, 996	.....	.....	47, 996	.....
Repair and shop work, miscellaneous.....	86	45, 000	.....	.....	.....	.....	.....
Total.....	374	130, 702	232, 700	.....	.....	232, 700	.....

¹ Estimate.

² With selling agent feature.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Texas—State penitentiary (including prison farms throughout the State)—Huntsville.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Farm, garden, dairy, and live stock.....	2,678	\$200,000	\$494,054			\$494,054	
Linens, etc., making and mending.....	24	63,037					
Repair and shop work, miscellaneous.....	37	19,067					
Shoemaking.....	10	42,657					
Total.....	2,749	324,761	494,054			494,054	

Utah—State prison—Salt Lake City.

Clothing:							
Garment making, unclassified.....	(¹)	\$212					
Tailoring.....	2	1,492					
Farm, garden, dairy, and live stock.....	29	7,606	\$2,056			\$2,056	
Linens, etc., making and mending.....	1	481					
Total.....	32	9,791	2,056			2,056	

Vermont—State prison and house of correction—Rutland.

Laundry work.....	17		\$5,679			\$5,679	
-------------------	----	--	---------	--	--	---------	--

Vermont—State prison department, house of correction for men—Windsor.

Farm, garden, dairy, and live stock.....	20	\$8,265	\$2,571			\$2,571	
Shoemaking.....	176			\$664,313		664,313	\$34,349
Total.....	196	8,265	2,571	664,313		666,884	34,349

Virginia—State penitentiary—Richmond.

Clothing:							
Garment making, unclassified.....	8	\$8,059					
Overalls.....	20			¹ \$41,472	¹ \$41,472		\$5,760
Jumpers.....	14			¹ 29,740	¹ 29,740		4,032
Work pants.....	133			¹ 285,028	¹ 285,028		38,305
Work shirts.....	3			¹ 6,972	¹ 6,972		864
Farm, garden, dairy, and live stock.....	34		\$28,475			28,475	
Furniture.....	48		75,615			75,615	
Printing.....	12	16,972					
Quarrying limestone.....	34		24,197			24,197	
Shoe repairing.....	1	1,463					
Total.....	307	26,494	128,287		363,212	491,499	48,961

¹ Estimate.

² Less than 1.

[727]

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Washington—State penitentiary—Walla Walla.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Clothing:							
Garment making, unclassified	11	\$9,315					
Tailoring	25	20,806					
Farm, garden, dairy, and live stock	28	24,598	\$3,727			\$3,727	
Linens, etc., making and mending	10	8,187					
Repair and shop work, miscellaneous	14	8,729					
Shoe making	25	12,572					
Shoe repairing	3	1,229					
Soap	1	3,500					
Tags, plates, signs, etc.	66	37,957					
Total	183	126,893	3,727			3,727	

Washington—State reformatory—Monroe.

Brick manufacturing	8	\$900	\$1,176			\$1,176	
Clothing:							
Garment making, unclassified	4	3,265					
Tailor shop	10	9,745					
Farm, garden, dairy, and livestock	73	32,162	2,599			2,599	
Furniture	3	2,734					
Linens, etc., making and mending	3	2,875					
Mattresses, cotton and upholstery	(^a)	170					
Printing	3	3,250					
Repair and shop work, miscellaneous	6	7,795					
Shoe repairing	2	1,812					
Total	112	64,708	3,775			3,775	

West Virginia—State penitentiary—Moundsville.

Brooms	87				\$251,000	\$251,000	\$18,414
Clothing:							
Work pants	409				1,229,174	1,229,174	88,466
Work shirts	469				1,035,074	1,035,074	101,444
Coal mining	14	\$16,000					
Farm, garden, dairy, and live stock	46	35,891	\$20,504			20,504	
Linens, etc., making and mending	20	14,567					
Printing	12	6,177					
Repair and shop work, miscellaneous	11	13,000					
Whips	83				63,200	63,200	17,568
Total	1,151	85,635	20,504		2,578,448	2,598,952	225,892

¹ Estimate.

² Less than 1.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Continued.

Wisconsin—State reformatory—Green Bay.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Brooms.....		²⁴ \$665	²⁴ \$55			\$55	
Brick.....			²⁴ 169			169	
Clothing:							
Garment making, unclassified.	1	571					
Children's play suits.....	135			\$1,149,030		1,149,030	\$61,229
Tailoring.....	13	10,685					
Farm, garden, dairy, and live stock.....	32	19,509	704			704	
Granite cutting (monumental work).....	23		10,641			10,641	
Linens, etc., making and mending.....	1	3,388					
Total.....	205	34,818	11,569	1,149,030		1,160,599	61,229

Wisconsin—Industrial Home for Women—Taycheedah.

Clothing:							
Garment making and mending.....	1	\$104					
Tailoring.....	(²)	35					
Farm, garden, dairy, and live stock.....	11	2,663	\$247			\$247	
Linens, etc., making and mending.....	4	731	181			181	
Total.....	16	3,533	428			428	

Wisconsin—State prison—Waupun.

Baking, commercial.....	(²)	\$900					
Clothing:							
Garment making, unclassified	2	2,446					
Tailoring.....	10	3,921					
Farm, garden, dairy, and live stock.....	101	56,720	\$21,935			\$21,935	
Hosiery.....	320			\$681,446		681,446	\$139,682
Laundry.....	(²)	900					
Linens, etc., making and mending.....	2	1,677					
Printing.....	4	4,885					
Quarrying and crushing stone.....	1	3,053	33			33	
Repair and shop work, miscellaneous.....	1	10,050					
Shoemaking.....	16	15,800	28,074			28,074	
Tags, licenses, etc.....	12	60,405	171			171	
Twine.....	85	676	474,246			474,246	
Total.....	554	161,433	524,459		681,446	1,205,905	139,682

Wyoming—State penitentiary—Rawlins.

Clothing:							
Men's cotton work shirts.....	212			\$1,696,014		\$1,696,014	\$42,053
Farm, garden, dairy, and live stock.....	13	\$7,017					
Total.....	225	7,017		1,696,014		1,696,014	42,053

¹ Estimate.

² Less than 1.

²⁴ Plant not in operation this year; sales made from stock on hand.

TABLE 4.—VALUE OF GOODS USED OR SOLD THAT WERE PRODUCED UNDER THE STATE-USE, PUBLIC-ACCOUNT, PIECE-PRICE, AND CONTRACT SYSTEMS, AVERAGE NUMBER OF CONVICTS EMPLOYED, AND AMOUNT RECEIVED FOR LABOR OF CONVICTS, BY INDUSTRY—Concluded.

Wyoming—Industrial institute—Worland.

Industry.	Average number of convicts employed under systems named.	Value of goods used produced under State-use system.	Value of goods or produce sold, by system under which produced.				Amount paid institution for labor of convicts.
			Public account.	Piece price.	Contract.	Total.	
Farm, garden, dairy, and livestock	39	\$13,294	\$1,862	.....	.....	\$1,862	.....

United States penitentiary—Atlanta, Ga.

Clothing:							
Garment making, unclassified.	6	\$7,487	.....	.....	.....	.....	.....
Overalls and jumpers.....	6	7,632	.....	.....	.....	.....	.....
Tailoring.....	52	49,091	.....	.....	.....	.....	.....
Farm, garden, dairy, and livestock.	180	73,074	.....	.....	.....	.....	.....
Furniture (wood and iron).....	12	6,935	.....	.....	.....	.....	.....
Linens, etc., making and mending.	3	2,677	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	125	110,390	.....	.....	.....	.....	.....
Shoemaking.....	16	20,012	.....	.....	.....	.....	.....
Shoe repairing.....	7	6,335	.....	.....	.....	.....	.....
Textiles:							
Duck, cotton.....	1,631	1,710,437	.....	.....	.....	.....	.....
Duck, remnants and waste...	16	.....	\$16,693	.....	.....	\$16,693	.....
Underwear.....	12	12,881	.....	.....	.....	.....	.....
Total.....	2,066	2,006,951	16,693	.....	.....	16,693	.....

United States penitentiary—Leavenworth, Kans.

Brick.....	45	\$9,372	.....	.....	.....	.....	.....
Brooms and brushes.....	6	2,396	.....	.....	.....	.....	.....
Clothing:							
Overalls and jumpers.....	11	5,769	.....	.....	.....	.....	.....
Tailoring.....	58	29,540	.....	.....	.....	.....	.....
Work shirts.....	8	3,905	.....	.....	.....	.....	.....
Farm, garden, dairy, and livestock.	85	42,896	.....	.....	.....	.....	.....
Linens, etc., making and mending.	29	14,597	.....	.....	.....	.....	.....
Printing.....	33	6,369	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	194	66,742	.....	.....	.....	.....	.....
Shoemaking.....	41	21,307	.....	.....	.....	.....	.....
Shoe repairing.....	31	15,994	.....	.....	.....	.....	.....
Total.....	541	218,887	.....	.....	.....	.....	.....

United States penitentiary—McNeil Island, Wash.

Clothing:							
Garment making, unclassified.	2	\$1,677	.....	.....	.....	.....	.....
Tailoring.....	2	2,020	.....	.....	.....	.....	.....
Farm, garden, dairy, and livestock.	33	17,987	.....	.....	.....	.....	.....
Furniture.....	4	997	.....	.....	.....	.....	.....
Linens, etc., making and mending.	4	4,175	.....	.....	.....	.....	.....
Repair and shop work, miscellaneous.....	19	27,338	.....	.....	.....	.....	.....
Sand and gravel unloaded.....	(^a)	495	.....	.....	.....	.....	.....
Shoe repairing.....	2	2,342	.....	.....	.....	.....	.....
Wood cutting and unloading.....	28	24,322	.....	.....	.....	.....	.....
Total.....	94	81,398	.....	.....	.....	.....	.....

^a Less than 1.

TABLE 5.—AVERAGE NUMBER OF STATE AND FEDERAL CONVICTS EMPLOYED UNDER PUBLIC WORKS AND WAYS SYSTEM AND VALUE OF CONSTRUCTIONS, BY STATE.

State.	Average number of convicts employed on—		Value of—	
	Building construction.	Road construction.	Building construction.	Road construction.
Alabama.....	264		\$1, 112, 872	
Arizona.....		34		\$60, 000
California:				
Folsom.....	174	185	130, 000	240, 000
San Quentin.....		254		400, 000
Colorado.....	317	62	225, 000	500, 000
District of Columbia.....	64		¹ 165, 000	
Florida.....	6	757	12, 000	2, 028, 318
Georgia.....		3, 258		5, 030, 350
Illinois.....	677		500, 000	
Indiana.....	28		30, 000	
Iowa.....	100		66, 000	
Kansas.....	63		195, 000	
Louisiana ²	455		³ 53, 291	
Maine.....	12		70, 000	
Maryland:				
Baltimore.....		6		⁴ 3, 179
Jessups.....		3		1, 561
Michigan:				
Ionia.....	153		57, 000	
Jackson.....	325		⁵ 100, 489	
Marquette.....	19		32, 876	
Minnesota.....	9		13, 949	
Missouri.....	4		2, 184	
Montana.....		44		25, 975
New Mexico.....		13		5, 000
New York:				
Auburn.....	7	31	20, 000	44, 842
Comstock.....	15	42	17, 000	34, 852
Dannemora.....	53	4	42, 000	2, 411
North Carolina.....		559		1, 455, 175
Oklahoma.....	82		⁶ 54, 360	
Pennsylvania.....	191		365, 318	
Utah.....	7		⁷ 75, 000	
Vermont.....		30		⁸ 10, 000
Virginia.....		550		1, 786, 800
Washington:				
Walla Walla.....	(⁹)		1, 500	
Monroe.....	2	5	7, 000	5, 250
West Virginia.....		130		¹⁰ 196, 000
Wisconsin.....	7		26, 000	
Total State Institutions.....	3, 034	5, 967	3, 373, 830	11, 827, 714
Kansas:				
United States penitentiary.....	729		65, 056	
Washington:				
United States penitentiary.....	33		64, 945	
Total, United States Institutions.....	762		130, 001	
Total, all institutions.....	3, 796	5, 967	3, 503, 831	11, 827, 714

¹ Estimate; also includes railroad construction, \$40,000.² Headquarters of the convict department at Baton Rouge. Convicts are distributed throughout the State on prison farms.³ Construction of levees and grade work.⁴ Represents what State paid institution and inmates.⁵ Includes some repair work.⁶ Construction work on Bull Creek Dam.⁷ Estimate of work on dam in Parleys Canyon.⁸ Estimate.⁹ Less than 1.¹⁰ Grading and draining roads.

Shifting of Occupations among Wage Earners as Determined by Occupational History of Industrial Policyholders.

By LOUIS I. DUBLIN, PH. D., STATISTICIAN, AND ROBERT J. VANE, JR.,
METROPOLITAN LIFE INSURANCE CO., NEW YORK.

THE effect of occupation on both health and longevity obviously is a subject of great interest to the life insurance companies. They are keen to evaluate such effects, in order to classify fairly applicants for insurance in premium groups according to the extent of their hazard. In the past, no one company has had a sufficiently large number of persons insured in any particular occupation to make it possible to determine the actual life span and risk of any large number of such occupations. It has been necessary for the larger companies to combine their experience, and as a result an instructive investigation on occupational mortality was issued in 1913 as a part of the Medico-Actuarial Investigation.¹ This report was limited entirely to the ordinary policyholders of the companies and largely to so-called standard applicants. This very limitation excluded at one stroke the large number of insured who are exposed to a serious amount of hazard, although a few occupations with decided hazards were included. The value of this investigation was also somewhat marred by the fact that it was based entirely on the occupation at the time of the issuance of the insurance and did not take into account at all the shifting of occupations after the policies were issued.

Since the above investigation was completed, many students of industrial hygiene have looked to the industrial insurance companies as perhaps better equipped than others to compile accurate mortality statistics for various occupations of the industrial type. The thought has been that such companies, with their very large industrial clientele, could keep records of their risks by occupation and at regular intervals evaluate the mortality of homogeneous working-class groups. This, however, has always been considered an impossible task by those intrusted with the mortality records of such companies. In the first place, it has seemed impossible to maintain a separate file of industrial policyholders according to occupation because of the great cost that such a file would involve, and, second, because it has been felt that any such file would hardly meet with the first requirement of the investigation due to the enormous shifting of occupations among industrial workers. The feeling, therefore, has been that too little would be gained from such an investigation to justify the cost of keeping the necessary records. The following tabulation was undertaken, at the request of Mr. Ethelbert Stewart, United States Commissioner of Labor Statistics, to determine the extent to which our suspicion as to the shifting of occupations in the life of the worker was actually justified by the facts. Incidentally, such a tabulation should throw some light on the occupational history of industrial workers, although, of course, it was realized that

¹ Association of Life Insurance Medical Directors and the Actuarial Society of America. Medico-Actuarial Mortality Investigation, Vol. III, Effect of Occupation on Mortality. New York, 1913.

no complete history could be obtained from the records at hand. It is obviously a matter of interest to know whether men are more likely to shift their occupations if their initial employment exposes them to such hazards as excessive heat, to dusts, to poisonous gases or to arduous labor; likewise, whether the skill required plays any part in determining the continuity of such employment. The purpose of this study, therefore, was a dual one. It was, first, to answer the specific question as to whether changes are a serious item in the employment history of workers, and, second, what relation occupations bear to each other, as determined by the proportion of workers going from one specified occupation to another.

This study was limited entirely to two records of the occupation as kept for industrial policyholders of the Metropolitan Life Insurance Co., namely, that at the time of the issuance of the policy and that at the time of the death of the policyholders. The cases were selected at random from among those men upon whom the company paid death claims during the months of August, September, and October, 1923. A total of 4,198 cases was included. The table shows, for each main industrial heading and for the numerically more important occupations, the per cent remaining at death in the same industry and occupation as at the time of the issuance of the insurance, together with the number in the several occupations into which the original workers had gone. In order that the table might not be unduly extended it was found necessary to limit the showing of the occupations into which the policyholders went after leaving their original occupations. It was decided not to show the distribution by particular occupations for the following broad industrial groups: Agriculture, extraction of minerals, trade, public service, and clerical occupations. It was found upon inspection that no less than 70 per cent of the total cases coming under each of these broad industrial titles were accounted for in one or at most in two kindred occupations; for example, there were 301 cases recorded as engaged in "trade," but of these 139 were merchants or shopkeepers, and 108 were store clerks or salesmen. These similar occupations together accounted for 82 per cent of the total number of cases. It is clear that the total for the combined trade occupations is representative of these two important classes and that very little would be gained by showing the distribution among other occupations of the remaining 54 cases. A similar condition obtains in the other industries mentioned above. The most important individual occupations within each of these industries are shown in footnotes to the table, together with the number of cases and the per cent which such cases are of the total number for the entire industry. The group of "professional" occupations contains no one occupation of outstanding importance. It is a miscellaneous group made up of actors and teachers, photographers, nurses, and a number of other occupations requiring varying degrees of training. The manufacturing and mechanical industries were separated into four main divisions, namely, skilled building trades, other skilled trades, unqualified labor, and manufacturing operatives and laborers. It should be noted that for all of these industries the number of deaths upon which were calculated the proportion remaining in the same occupation at death as at issuance of insurance will not be found in the table. These percentages were calculated on and abstracted

from a separate tabulation sheet. In classifying the various occupations under industrial headings the Classified Index to Occupations, published by the United States Bureau of the Census in 1921, was followed. Although the statement of occupation on the industrial applications did not permit of the extensive classification used by the Census Office, it was found that the titles of the code of the company fitted very well into the census code. The chief fault with the industrial code of the company lies in the fact that it does not provide for a separation of laborers from the skilled and semi-skilled workers in the manufacturing industries. It would be highly desirable to have such a distinction made, but the information given on the company's industrial applications makes such a distinction impracticable.

[734]

occu-
upa-
1921,
dus-
the
fault
does
emi-
ghly
iven
tion

OCCUPATION AT ISSUANCE OF POLICY AND OCCUPATION AT DEATH OF MALE POLICYHOLDERS AGED 15 YEARS AND OVER.
[Mortality experience of Metropolitan Life Insurance Co., Industrial Department, August, September, and October, 1923]

Occupation at issuance of policy.			Occupation at death.										Domestic and personal service.			Clerical occupations.	All others.	
Num-ber at is-suance of policy.	Per cent in same occu-pation at death as at is-suance of policy.	Agriculture, etc.	Ex-trac-tion of min-erals.	Manufacturing and mechanical industries.				Rail-way (steam and street) employ-ees.	Transportation.		Trade.	Pub-lic serv-ice.	Pro-fes-sional serv-ice.	Jani-tors and por-ters.	Sa-loon keep-ers.			To-tal.
				skilled build-ing trades.	Other skilled trades.	La-bor-ers (un-qual-ified).	Man-ufac-turing oper-atives and labor-ers.		Total.	Long-shore-men, and sail-ors, etc.						Chauf-feurs and driv-ers.	To-tal.	
Agriculture, forestry, and animal husbandry	162	41.9	68	2	8	6	18	9	5	5	21	44	61	80	12	44	4	25
Farmers	153	41.8	65	2	5	6	17	9	5	5	7	13	26	28	8	10	1	24
Extraction of minerals	83	72.3	60	60	1	1	6	3	1	1	1	1	3	1	1	1	1	6
Coal miners (underground)	54	71.6	54	54	1	1	6	3	1	1	1	1	2	1	1	1	1	5
Manufacturing and mechanical industries	2,285	67.3	74	18	354	380	267	536	77	77	21	44	162	80	12	44	4	234
Skilled trades	958	63.5	14	2	283	326	46	43	30	30	7	13	51	26	8	10	1	96
Blacksmiths	49	46.9	1	1	3	26	3	3	4	4	1	2	7	2	1	1	1	7
Carpenters	164	59.1	3	3	107	18	9	6	4	4	1	1	1	7	1	1	1	15
Iron molders	29	55.2	5	5	12	84	10	14	8	8	2	6	16	4	1	1	1	4
Machinists	180	46.1	2	2	31	2	3	3	1	1	1	1	1	2	1	1	1	20
Masons and bricklayers	54	55.6	2	2	39	4	2	4	3	3	1	1	5	2	1	1	1	9
Painters	95	50.5	1	1	59	4	2	4	5	2	1	1	2	1	1	1	1	14
Plumbers and fitters	46	63.0	1	1	31	3	4	5	2	2	1	1	2	1	1	1	1	9
Printers and pressmen	39	59.0	2	2	26	2	3	3	1	1	1	1	2	1	1	1	1	14
Shoemakers	40	50.0	3	3	23	2	3	3	1	1	1	1	1	1	1	1	1	1
Stationary engineers and firemen	75	40.0	2	2	1	35	4	7	2	2	2	2	6	3	1	3	1	4
Tailors (factory and shop)	59	74.6	1	1	1	46	1	2	1	1	1	1	1	1	1	1	1	4
Laborers (unqualified)	681	25.8	39	13	45	44	178	99	34	34	12	19	81	28	4	21	2	7
Manufacturing operatives and laborers	646	61.0	21	3	26	10	43	394	13	13	2	12	30	24	13	1	20	48
Cotton, silk, and woolen mill operatives	141	56.7	6	1	5	6	6	92	1	1	1	4	6	3	1	3	3	7
Furniture makers	33	51.5	1	1	3	3	3	22	1	1	1	1	2	1	2	2	2	7
Glass workers	25	56.0	1	1	1	1	1	17	1	1	1	1	1	1	1	1	1	2
Iron-foundry workers	23	34.8	1	1	1	1	3	11	1	1	1	1	2	1	1	1	1	2
Iron and steel mill workers	61	41.0	1	1	4	3	9	31	1	1	1	1	2	4	1	1	1	4
Tobacco workers	25	56.0	1	1	1	1	18	18	1	1	1	1	1	2	2	2	2	4
Woodworkers	26	38.5	1	1	4	1	14	14	1	1	1	1	1	1	1	1	1	1

1 Included in these totals may be some cases in other occupations than those specified.

OCCUPATION AT ISSUANCE OF POLICY AND OCCUPATION AT DEATH OF MALE POLICYHOLDERS AGED 15 YEARS AND OVER—Concluded.

Occupation at death.																			
Occupation at issuance of policy.	Num-ber at is-suance of policy.	Per cent in same occu-pation at death as at is-suance of policy.	Manufacturing and mechanical industries.						Transportation.			Domestic and personal service.			Cler-ical occu-pa-tions.	All others.			
			Ex-trac-tion of min-erals.	Skilled build-ing trades.	Other skilled trades.	La-bor-ers (un-qual-ified).	Man-ufac-tur-ing oper-atives and labor-ers.	Total.	Rail-way (steam and street) employ-ees.	Long-shore-men, sal-lors, etc.	Chauf-feurs and driv-ers.	To-tal.	Trade.	Pub-lic serv-ice.			Pro-fes-sional serv-ice.	Jan-itors and keep-ers.	To-tal.
Transportation	459	50.5	11	2	21	24	40	24	109	79	20	108	232	15	24	9	14	16	36
Hostlers and stablemen	27	25.9	3		1	2	2	1	6		1	3	11	1	2	1	2		2
Longshoremen and stevedores	21	38.1			2	2	3	1	8		9		9						4
Railway track and yard em- ployees	47	63.8			2	2	4	1	9	32		1	33	1	1			1	2
Street railway employees	27	55.6			5	1		2	8	15		1	16	1		1	1		1
Teamsters, drivers, and chaut- feurs	272	34.6	7	1	9	15	30	17	71	8	1	102	115	11	19	6	10	15	23
Trade	304	52.3	8	1	10	8	16	16	50	3	1	13	17	159	11	2	3	14	28
Hucksters and peddlers	33	48.5	4				5	1	6							1	1	3	1
Merchants and storekeepers	130	47.7	3	1	5	3	5	6	19		1	4	5	73	2	1	1	3	16
Store clerks and salesmen	134	38.1	1		5	5	5	9	24	3		9	12	64	9	1	3	8	9
Public service	64	53.1	2	2		5	3	1	9	6			7	1	34	3	4	1	4
Watchmen and guards	40	42.9	2	1		5	3	1	9	6			7	1	21	3	4	4	4
Professional service	35	71.4						1	1							25		4	4
Domestic and personal service	237	45.6	3		10	12	16	9	47	6	1	7	14	19	8	2	14	108	28
Barbers and hairdressers	42	69.0			2	1	3	2	8							1	29	1	3
Janitors and building em- ployees	42	42.9			1	1	7		9	1	1					1	19	1	8
Saloon keepers and bar tenders	59	23.7			4	8	2	2	16	3		3	6	7	3		14	16	3
Clerical occupations	189	39.2	2		7	8	6	10	31	8	1	9	20	13	10	8	1	5	74
Agents, canvassers, etc	32	37.5				2		1	3	1			1	2	1		1	2	14
Bookkeepers and office as- sistants	123	35.0	2		4	5	4	4	17	5	1	6	14	9	7	7	2	3	50
Unspecified and retired	380	28.7	17	2	19	34	38	53	144	13	1	13	29	24	11	7	10	18	910
All occupations	4,198	41.5	185	387	430	477	410	662	1,979	198	45	199	492	301	185	57	98	233	500

¹ Farmers (174 deaths) make up 94 per cent of the total.² Coal miners (underground) (72 deaths) make up 83 per cent of the total.³ Merchants and storekeepers (139 deaths) and store clerks and salesmen (108 deaths) make up 82 per cent of the total.⁴ Watchmen and guards (129 deaths) make up 70 per cent of the total.⁵ Bookkeepers and office assistants (103 deaths) and shipping and stock clerks (32 deaths) make up 75 per cent of the total.

The combined investigation shows that only 41.5 per cent were found in the same occupation at death as at the issuance of the insurance. A higher proportion, namely 57.3 per cent, remained in the same industry, although not necessarily in the same occupation. The proportions remaining in the same occupation varied, of course, with the several occupations, ranging from the minimum of 23.7 per cent for saloon keepers and bartenders to a maximum of 74.6 per cent for tailors.

Industries and Occupations Showing a High Proportion Remaining in Same Occupation at Death as at Issuance of Insurance.

NEXT to tailors, the highest proportion of constancy in occupation for any group was found among mining occupations, namely, 72.3 per cent. It should be explained that this high proportion for miners is due partly to the classification code, which provides that anyone working in the mines, regardless of his occupation, be classified under the mining title. The figures do, however, indicate clearly a tendency on the part of mine workers to remain in the mines and to advance or retrograde within the mining employments. Railroad track and yard workers also show a tendency to remain in some track or yard occupation. The proportion thus remaining was 63.8 per cent. Apart from these two groups, probably the most important factor determining the proportion of workers remaining in an occupation between the date of issuance of the insurance and the date of death is the degree of skill required by the occupation. Thus we find among the highest occupations, tailors, 74.6 per cent; professional workers, 71.4 per cent; barbers and hairdressers, 69 per cent; plumbers and fitters, 63 per cent; carpenters, 59.1 per cent; textile mill operatives, 56.7 per cent; glass workers, 56 per cent; and tobacco workers, 56 per cent. In all probability the skilled and semiskilled operatives in textile mills, tobacco factories, and glass factories would show an even higher proportion if the laborers had not been included with them. It is to be regretted that the occupation code used did not permit the actual differentiation of clear-cut occupations in all these cases. To have done that, however, would have made the entire task impracticable.

Industries and Occupations with a Low Proportion Remaining in Same Industry and Occupation at Death as at Issuance of Insurance.

THE larger number of the listed occupations showed relatively low percentages of constancy. The lowest were represented by saloon keepers and bartenders, 23.7 per cent; hostlers and stablemen, 25.9 per cent; and teamsters, drivers, and chauffeurs, 34.6 per cent. It should be noted, however, that each of these occupations is perforce gradually becoming of less importance. Hostlers, stablemen, teamsters, and drivers are being gradually forced to seek other employments, due to the increasing use of the automobile as a vehicle of transportation. Saloon keepers and bartenders have been practically legislated out of the list of occupations, except that a number still continue to tend bar in soft-drink establishments. The proportion for saloon keepers would have been even smaller, but for the fact that the company has a large number of Canadian

policyholders who are included in the investigation. As would be expected, unskilled labor showed a very low proportion of constancy, 25.8 per cent. The following occupations, all of which are made up entirely of or contain a large proportion of unskilled workers, showed a low percentage in the same occupation at death as at issuance of insurance. Iron-foundry workers, 34.8 per cent; long-shoremen and stevedores, 38.1 per cent; iron and steel mill workers, 41 per cent; watchmen and guards, 42.9 per cent; janitors and building employees, 42.9 per cent. It is noteworthy to find among the occupations with a very low proportion of constancy such occupations as bookkeeper and office assistants, 35 per cent; store clerks and salesmen, 38.1 per cent. The explanation of this probably lies in the fact that the largest number of persons engaged in these pursuits are young people who change, when an opportunity presents itself, to more remunerative employments. The relatively low wages of clerks, as compared with the high wages in other occupations at the present time, is probably an important factor in the low figure for clerks and explains the shifting to the more remunerative employments, such as skilled building trades, other skilled trades, chauffeurs, manufacturing operatives and laborers, and steam and street railroad occupations. The low proportion for farmers, 41.8 per cent, seems to bear out the popular idea that these workers are leaving the farms because of high wages in other industries and the increasing difficulty of making farming on a small scale pay.

Relation of Occupation at Death to Occupation at Issuance of Insurance.

IT WAS expected that a close relationship might be shown between some occupations at the issuance of insurance and the occupations at death. The results, however, indicated no very close or direct connection. In a general way, it seems that the more skilled workers go later to other skilled trades, and the less skilled shift to laboring. Accordingly, it is found that only 4 per cent of the painters, 7 per cent of the tailors, and 13 per cent of the carpenters who shifted their occupation are classified at death among laborers unqualified, whereas 20 per cent of the iron-foundry workers, 25 per cent of the iron and steel mill workers, and 29 per cent of the janitors were so classified. Conversely, 32 per cent of the painters, 20 per cent of the tailors, and 15 per cent of the carpenters who shifted either went to one of the skilled building trades or to some other skilled trade. For the less skilled iron-foundry workers the proportion of those changing occupations who changed to the skilled trades was only 7 per cent, and for janitors 8 per cent. The proportion among iron and steel mill workers is an exception, as 19 per cent of such workers changing their occupations went to the skilled trades. It is probable that this high figure is a matter of chance variation, due to the small number of cases. In considering the relation of occupation at death to occupation at issuance of insurance it must be kept in mind that the deaths in this study all occurred within the brief period of three months. Obviously, the business conditions prevailing at the time of the study affected the results very materially. Thus, during July, August, and September, 1923, there was heavy activity in the building trades and wages were high. This fact accounts in part for the large proportion of some of the skilled workers who changed

their occupation to go into the skilled building trades. Among those with such high proportions were machinists, 12 per cent; printers and pressmen, 13 per cent; shoemakers, 15 per cent; and barbers and hairdressers, 15 per cent. A study covering the deaths over a much longer period of time would show a somewhat different condition.

Undoubtedly, a large proportion of the shifting of occupations in some instances is due to the weakened condition of the men brought about by arduous labor, exposure to dusts, to fumes, to poisons, etc. It is difficult to show this in so limited a study. However, we have an indication of the operation of such factors in a few of the occupations. The occupation of painter is one which requires considerable skill and one which should therefore have a high proportion of constancy of occupation, but only 50.5 per cent of such men remained painters. It is possible that the explanation for this comparatively low proportion lies in the fact that these men had been poisoned by lead, which made it necessary for them to accept some other occupation. If we had a sufficient number of deaths, we might be able to establish this fact more definitely by the industries to which the men went, but with our limited number of deaths this could not be done. Undoubtedly, among the glass workers, the iron-foundry workers, and the iron and steel mill workers there are a number of men who were forced to leave their occupations because of exposure to excessive heat and heavy labor. But again the number of deaths is too small to show any relation between the effect of their employment and the occupations to which these men went. Perhaps we might find such instances among the janitors and porters or among the public service group, which is largely composed of watchmen and guards; possibly also among the steam and street railroad employments, all of which are represented among the occupations to which they went. If we could have included in our study some of the occupations with more pronounced hazards, such as grinders, stone cutters and sandblasters, and operatives in chemical manufacturing, we would, undoubtedly, have found the hazards of employment to be one of the most important factors in the shifting of employment.

We have shown that the shifting of occupation is of serious importance in the employment history of workers. The contention of the insurance officials that this factor makes valueless extensive studies of mortality by occupation among these industrial workers is therefore justified. The most important factors in the shifting of occupation are shown to be the degree of skill required by the occupation and the activity and high wages in different fields of employments, and we have indicated that the hazards of employment are also important. A general tendency was noted for skilled workers to shift to other skilled employments and for the unskilled to remain in unskilled occupations or to engage in some form of laboring. We are aware that the results of an analysis covering only 4,200 deaths is only suggestive of what a more comprehensive study might show. It would be desirable, for one thing, to study each occupation by the age at the issuance of insurance as well as for the period of time which had elapsed between the date of issuance of the policy and the date of death. In this way we should get a fairly complete occupational history and arrive at some idea of the shifting about due merely to advancement on the part of the younger men and to the

backsliding of the older men. Such an analysis would be of value not only to the insurance executive but to the economist and the industrial manager as well. It is hoped that this limited study will suggest a more extensive one to those who have the facilities for studying the occupational history of industrial workers in more detail. It would be very desirable to have the points brought out in this analysis kept in mind and to include also a larger number of specific occupation titles, so that the influence of the hazards of employment on the shifting of occupation might be more clearly determined.

The German Metal Workers' Federation.¹

By FRITZ KUMMER, EDITOR OF METALLARBEITER-ZEITUNG.

IN JUNE, 1891, the craft unions of the German metal industry met in conference at Frankfort on the Main with the object of founding a national organization for the workers of that industry. Up to that time there had existed only a small number of unimportant craft unions, which as a rule limited their activities to their special trade and locality and in some instances were either only loosely connected with each other or were not connected at all. To be sure, the necessity of establishing a closer connection between the various trade groups had been felt long before, but its realization was prevented by legal obstacles and also by divergences of opinion as to the best method of bringing about such a connection. The controversy centered in the question of "craft unionism versus industrial unionism." Should local unions be formed for each individual trade, the locals of each trade linked together into national unions, and the various national trade-unions brought together into a federation, or should all trades and occupations of the metal industry be brought together into one local union and the locals so organized be linked together into a national union?

This question had been discussed in several conferences, but had never been decided. The Frankfort conference finally settled the controversy by adopting by a large majority a resolution which provided that all trades and occupations of the metal industry should be organized into a single local union—that is, that organization should be effected on an industrial and not on a craft basis. The new national organization was given the name "German Metal Workers' Federation" (*Deutscher Metallarbeiter-Verband*). It was to be "the organization of all persons employed in the metal industry." The proponents of craft unionism made gloomy prophecies concerning the future of the new federation, and the other side also can hardly be said to have acclaimed with enthusiasm the decision of the conference. At all events, few of the delegates to the conference anticipated that the trade-union child, at whose christening they had assisted, would in a few decades become the giant of the international trade-union family. The German Metal Workers' Federation began its career with a membership of only 23,000, but at the end of 1922 it had more than 1,600,000 full-paying members. Its membership has increased with fair regularity, a decrease having taken place only during the World War. This is shown by the following table:

¹ Translated by Alfred Maylander, of the United States Bureau of Labor Statistics.

DEVELOPMENT OF GERMAN METAL WORKERS' FEDERATION, 1891 TO 1922.

Year.	Num- ber of local unions.	Member- ship.
1891.....	231	22, 205
1900.....	446	100, 762
1910.....	445	464, 016
1915.....	436	234, 307
1920.....	717	1, 608, 932
1922.....	746	1, 624, 554

This stupendous growth of the federation is, of course, largely due to the powerful expansion of the German metal industry. The transformation of Germany from an agricultural into an industrial country had begun even before the conference. The full magnitude of this economic revolution can be appreciated only if one considers that while, in 1882, 42.5 per cent of the German population were dependent on agriculture for their living, by 1907 this percentage had fallen to 28.6. During this 25-year period millions of men left the rural districts and flocked to the towns to find employment in industry. A very large, if not the largest, part of these migrants were absorbed by the metal industry. The need in this industry for cheap and willing labor was great and steadily growing. In the smelting process, as well as in the construction of machinery, numerous important inventions had been made which had to be tested, improved, and utilized. The German export trade needed more steamships and had to satisfy the growing demand of the world markets for German machinery and metal goods. Iron and steel became more and more the backbone of the entire economic life. Elevators and ore bridges, blast furnaces and converters sprang up over night in the ore and coal mining districts, and in their neighborhood large plants were built for the working up of the raw materials thus produced. Soon thereafter metal works and machinery factories were erected side by side throughout the entire country.

The peasants' sons, unskilled in any craft, generally found employment where physical strength counts for more than vocational training—that is, in the iron and steel industry. This change from farm to workshop increased their income and improved their standard of living, and this improvement, while small, was enough to make them forget their homesickness and to preclude any strong urge to join a trade-union for obtaining better working conditions. This circumstance explains in part the fact that before the war only a few thousand of the workers in the iron and steel industry were members of the Metal Workers' Federation. A great change came, however, with the end of the war and the revolution, when the workers in the great iron and steel mills began to join the federation in large numbers.

From the first day of its existence the Metal Workers' Federation kept its doors wide open, because its aim, as already mentioned, has always been to become "the organization of all persons employed in the metal industry." In accordance with this aim, any man or woman, artisan, day laborer, or apprentice, who in any manner produced or worked up any kind of metal was welcomed by the

federation as a member. However, in a number of trades the call to join the common organization of the metal workers fell on deaf ears. The local unions of the molders, coppersmiths, engravers, blacksmiths, goldsmiths, and other trades held aloof from the Metal Workers' Federation, partly because they had no confidence in the future of the federation, and partly because they believed that their craft unions were better able to safeguard their interests. Stern reality, however, brought about a gradual change of opinion. Nearly every day taught them an expensive lesson which showed them the advisability of joining the young but steadily growing sister organization. One trade after the other joined the federation. Thus it has come about that for several years past all the trades in the metal industry, with the exception of the coppersmiths (about 7,000), have been organized in the Metal Workers' Federation, and even the coppersmiths' union is expected to amalgamate with the federation in the near future, since several thousand of its members have already joined. Among the 32 different trades organized in the federation, the machinists with over 363,000 members, form the most numerous occupational group, the turners with 124,000 members come next, and the blacksmiths with 66,000, the mechanics with 63,000, and the molders with 52,000, follow in the order named. (In these figures the unskilled workers and helpers employed in those callings are also included.) Skilled male workers form 43.6 per cent of the total membership of the federation, unskilled male workers 33.57 per cent, female workers 12.11 per cent, and juvenile workers 10.72 per cent. Thus the Metal Workers' Federation has actually become the organization of all persons employed in the German metal industry.

Organization and Administration.

IN THE German Metal Workers' Federation the supreme power is vested in the assembly of delegates, which convenes every other year. The delegates are chosen by the members, every 4,000 members being entitled to one delegate. The assembly determines the policies of the organization and elects its officers, the executive committee, and the editors of the official organs. Of the 22 officers who form the directorate (*Vorstand*), 11 must be engaged in active shop work, while the other 11 receive fixed salaries from the federation. The territorial field of activity of the federation is divided into 17 districts. At the head of each of these is a district agent (*Bezirksleiter*) with a staff of secretaries and clerks. The district agents are appointed and paid by the executive committee of the federation. A district committee elected by the district convention is in charge in each district of matters relating to organization. In cases of emergency (strikes, lockouts, etc.) the executive committee convenes the grand advisory council (*Erweiterter Beirat*), which is composed of the officers of the federation, the editors, the district agents, and three representatives of each of the 17 districts.

The officers of the local unions are elected each year by the membership of these unions. The salaried officials of the local unions may also be officers of the union. The local unions may retain 25 per cent of their revenues (initiation fees and membership dues). The remaining 75 per cent must be regularly transmitted to the treasury of the federation, which uses this money to defray the costs

of administration of its headquarters and of the district agencies and also to pay all benefits to members. Subject to the approval of the executive committee of the federation the local unions may for a limited period levy special assessments. The greatest possible uniformity and centralization is the ruling principle in the organization of the federation. In accordance with this principle all members of the federation must become members of the local union of their place of residence; all members, men, women, and apprentices, participate with equal rights in the elections, meetings, educational courses, etc., of their local union. Transfer from one local union to another is a very simple procedure, and is gratuitous. There are no special sections for the various trades. If occasionally one trade has to regulate a special matter, for instance, discuss a new wage schedule, demand special sanitary measures, or make an inquiry into the working conditions of the trade, then the members of the trade hold a special meeting, but such meetings are held very seldom. The same applies to national trade conferences, of which four have been held in recent years. They are always called and financed by the central executive committee of the federation.

At the end of 1922 six classes of membership dues were in force, to wit, for men over 21 years of age, men 18 to 21 years of age, women over 19 years of age, girls 16 to 18 years of age, apprentices, and invalids, the latter paying a very low rate merely to keep up their membership. The benefits vary in accordance with the amount of the dues. The relatively small number of contributory classes had, however, to be given up, owing to the rapid depreciation of German currency. Since, during the last months of 1923, wages had to be adjusted each week or every few days to the depreciation of the mark and the increased cost of living, and the money wages differed greatly from town to town, the old contributory classes could not be maintained. In recent months the rate of dues has been governed by the hourly wage rate, one week's dues being set at one hour's wage. If the wage rate changes, the rate of the weekly dues changes accordingly. Needless to say, this innovation greatly increases the work of the treasurer. In some localities or districts with fairly uniform industry the unions can get along with half a dozen contributory classes but in others two or three dozen classes have to be created. It is, however, generally hoped and desired that this costly and troublesome state of affairs will soon come to an end, and that with the stabilization of the German currency the former simple system of dues will again replace the present complex system. The dues are as a rule collected each week, either in the shop through a specially commissioned member or, where the members live in close proximity, through a salaried collector who goes from house to house. On payment of his weekly dues each member is handed the official journals and other literature of the federation.

Even when the German mark was still at par the balance sheet of this gigantic trade-union looked like the budget of a small State. The gradual inflation of the currency has, however, destroyed the value of the long rows of figures for purposes of comparison, and it would therefore be of little use to quote here any of these figures. Suffice it to say that in 1922 alone the receipts of the central treasury from dues and initiation fees amounted to over 1,733,000,000 marks

and that 353,000,000 marks were disbursed by it for the eight different kinds of benefits (strike, sickness, unemployment, travel, change of residence, death, distress, discharge for union activity). The receipts from the two sources named, as well as the disbursements for benefits, are, however, actually much greater, because the local unions, as has already been mentioned, retain 25 per cent of the receipts and grant considerable subsidies to the benefits paid by the central treasury.

During 1922 the Metal Workers' Federation recorded no less than 11,091 wage "actions" (*Lohnbewegungen*), of which 11,016 had the object of securing wage increases and 75 were directed against proposed wage reductions. More than 15,000,000 workers participated in the former and 104,000 in the latter. However, only 388 of these actions led to strikes (involving 204,000 workers); all the others were settled through negotiation. It may be said that practically all (99.3 per cent) of the actions resulted in full or at least partial success for the workers. The financing of these actions involved an expenditure of 309,942,000 marks by the federation. The uncommonly large number of wage actions speaks eloquently of the abnormal conditions in Germany. Owing to the steady depreciation of the mark and the consequent enhancement of prices, wage increases had to be demanded continuously by the workers, which explains the uncommonly large number of wage actions. With the stabilization of German currency their number will probably decrease considerably.

The extensive and varied duties of an organization of this kind and magnitude obviously can not be attended to solely by members who during the day are engaged in active work in the shops. In addition to the numerous unsalaried officers there were therefore (in 1922) 1,521 salaried officers and employees engaged in discharging the administrative duties of the federation. Among the latter were 11 officers of the federation, 2 editors, 17 district agents, 527 business managers of local unions, 318 stenographer-typists, and 271 collectors. The bureaus, printing establishments, libraries, and meeting halls of the unions are in many instances housed in buildings owned by the federation.

Educational Activities.

UP TO the revolution of 1918, the chief task of the free (social-democratic) trade-unions in Germany was to improve wages and working conditions and to educate the members for the attainment of this aim. Accordingly the program of the educational institutions of the trade-unions remained restricted to this somewhat narrow purpose. Whenever an attempt was made to extend the activities of the unions in this respect it led to conflicts with the monarchical State. Times innumerable, trade-unions or their members have been prosecuted and condemned for having extended their activities beyond their narrow legal sphere or because they have been thought to have done so. Actions and speeches of a political aspect were heavily punished by the courts. The monarchical State saw in the trade-unions nothing but organizations for the incitement of strikes and disturbers of the public peace and economic life, which merited persecution and suppression rather than to be called on for collaboration in the government and economic development of the country.

The great mass of the employers shared the views of the State concerning trade-unions. Even public opinion saw in the trade-unions only faultfinders and enemies of the Government and of the employers, who through their demands for better wages enhanced the prices of all commodities and thus injured the public. That the trade-unions might possess great possibilities for the preservation of the State and that they could and should become supporters of the State and of economic life were conceptions in monarchical times only rarely encountered outside of organized labor circles.

A change in these views did not come about until November, 1918, when a republican form of government had to be created to replace the monarchical form. In that hour of confusion, of lack of public authority and legal conceptions, the trade-unions showed much greater understanding of the needs of the State and of economic life than had generally been expected of them. The public began to comprehend that trade-unions were by no means superfluous and injurious institutions, but indispensable corporations that should be incorporated into the organism of the State and of economic life in order to become useful to the whole commonwealth. This comprehension led to the calling in of the trade-unions as collaborators in public institutions and corporations, i. e., to an extension of the activities of the trade-unions. In the years subsequent to the revolution the German trade-unions have thus become a strong force in promoting public peace and maintaining the republican régime.

In order to perform efficiently their many new tasks it becomes necessary for the trade-unions not only to increase the number of their leaders and to secure intellectually stronger men to lead them, but also to educate more thoroughly the great masses of the members. The majority of the trade-union leaders had been active as propagandists, strike leaders, office workers, or collectors of dues, but now they were required to act as the workers' representatives in negotiations for collective wage agreements, as economists, or even as pioneers of democracy. This required higher intellectual training. Also, the number of leaders had to be increased considerably. Immediately after the termination of the war, hundreds of thousands, even millions, of men flocked to the trade-unions. Most of them had never belonged to an organization and therefore knew little or nothing of the principles, traditions, and tasks of the trade-union movement. The close relation between rights and duties, between factory work and the national economic system was unknown to them. Thus, thorough and general educational training of the rank and file of the trade-unions became an urgent necessity, if the newcomers were not to be disappointed and a falling off in the membership was to be prevented. But for this task a sufficient number of capable persons was not available. Hundreds of trade-union officers, and as a rule the most efficient, had become, because of the revolution, ministers of State, police commissioners, chief county officials (*Landräte*), mayors, or other public officials, and other public institutions such as the wage boards and conciliation and arbitration boards required the services of a great number of trained trade-unionists. There was, therefore, a great shortage of trade-union leaders at the very time when a greater number of them was urgently needed. This state of affairs was dangerous to the trade-union movement itself

and to its influence upon public affairs. To avert this danger strenuous efforts were made for a considerable increase in the number of trade-union officers, teachers, economists, editors, organizers, and other officials, and the institutions for the schooling of the great mass of union members were at the same time enlarged and improved.

The Metal Workers' Federation has ever since its creation adhered to the principle that a labor organization, in addition to providing bodily nourishment for its members, must also provide food for their minds. Living up to this principle, it has every year in an increasing measure expended strenuous efforts and money on the education of its members. However, its expenditures did not suffice for the educational requirements arising under the republican régime. The federation had gained several hundred thousand members in the iron and steel industry who had to be imbued with the spirit of trade-unionism. Moreover, since the Metal Workers' Federation is the largest German labor organization the organized workers of other industries look up to it as a model, and thus there falls to it the difficult task of leading the other unions in all efforts to achieve industrial democracy, the highest aim of the German trade-union movement. All these circumstances made it imperative that the educational activities of the federation be extended and intensified. They had to be adjusted to the double aim of training leaders and of imbuing the great mass of the membership with a true trade-union spirit. With this aim in view the federation included among its educational activities the distribution of literature, the establishment of lecture courses and of a department of economics, and the sending of members to universities, academies, and similar higher educational institutions. The sum expended in 1922 for all these activities amounted to 216,941,000 marks, or 133.88 marks per capita of the membership.

Let us consider in the first place the attendance of universities, academies, etc., by members of the federation. It stands the trade-unions in good stead that the Government of republican Germany, as well as the communes, now appreciates the high value of the trade-union movement and has opened the public schools to trade-union members. As a rule these schools are supported by public funds and the students pay merely a low tuition fee. The trade-union members attending the schools receive from their union during the period of attendance, which varies between six weeks and one year, a sum sufficient for their sustenance and in addition compensation for their loss of wages, so that their families are provided for while they are attending school. The students are chosen by the executive committee of the federation from lists proposed by the local unions, after previous thorough examination of the mental and personal fitness of the prospective students. During 1922 the federation disbursed 1,878,000 marks for this purpose, exclusive of the allowances granted to students by the local unions.

A comparatively small number of members, only the most capable who seem fitted to become leaders or to hold high office, are chosen for attendance at universities. It is obvious that a university course is too slow a process of education for the requirements of the trade-unions. They need a process that will rapidly produce a corps of

officers and works council members intellectually equipped for their special tasks. This urgent need is best served by extension courses, which have been established and are superintended by the educational director of the Metal Workers' Federation. He is assisted by 35 professional teachers. According to the last annual report, 17 such courses were given, with an average attendance of 57 union members per course. The majority (65 per cent) of the students in these extension courses were works council members, 5 were women and the remainder were trade-union officers. The ultimate choice of the students to be enrolled in these courses is also made by the central executive committee of the federation; the central treasury of the federation maintains these students, furnishes them the required books, and compensates them for the loss in wages. The short duration (17 days) of these courses makes it necessary that instruction be limited to questions closely connected with the duties of works council members and trade-union officers, such as the development of capitalism, commercial and industrial management, labor legislation, industrial hygiene, and history of trade-unionism.

The economic department of the federation, under the direction of a trained expert, furnishes to trade-union officers, wage negotiators, and works council members, especially those delegated to serve on the board of directors of their establishments, through the medium of the periodical, *Volkswirtschaftliche Blätter*, reliable information on the condition of industry and of the individual establishment, imports and exports, business contracts concluded, and orders received by the individual corporations.

The economic department is divided into several sections, which systematically follow up the entire economic life, developments in the metal industry and the news in the political, economic, financial, and trade-union press, collect and compile all serviceable information, and above all study systematically the development of the trusts and concerns in the metal industry, their foreign and domestic business affairs, and their balance sheets. The results of these compilations and studies are currently communicated to the local unions and works councils, for use in wage negotiations and on other occasions. When the development of a matter—the development of the trusts, let us say—has reached a certain stage, the result is made accessible to the membership of the federation and under certain circumstances also to the public, through a special publication.

A special department, housed in the federation headquarters, has charge of the education of the juvenile members of the federation. The men in charge of this work in the individual local unions meet in conference at the headquarters from time to time to exchange experiences, etc. Instruction courses are held for apprentices and juvenile workers. In addition, every juvenile member receives weekly the Young People's Journal (*Jugendzeitung*) of the federation the contents of which are adapted to the intellectual and vocational needs of young workers. The Women's Journal (*Frauen-Zeitung*), which forms the intellectual bond of woman members, is also furnished gratuitously by the federation.

The oldest and perhaps the most efficacious means of education is the Metal Workers' Journal (*Metallarbeiter-Zeitung*), which has been

the official organ of the federation since the latter's creation. It is issued weekly and given gratuitously to every member. Owing to its large edition (1,748,000 copies), this journal is printed in three different cities (Berlin, Stuttgart, and Duisburg), but the editor's office is at the headquarters at Stuttgart. Two of these printing offices, which do printing for outside parties as well as for the federation, are owned by the federation.

Mention has been made of the education of the works council members, those very important factors in bringing about the democratization of industry. In addition to their duties, the works councils were given in 1922 the legal right of delegating a member to serve on the board of directors of their establishment, if the latter is operated by a stock company. This new right can, however, be of advantage to the workers only if the council members delegated to serve on boards of directors are men with a high sense of duty, of great intellect, and well versed in business matters. Such delegates must be well informed as to the economic situation of the industry in general and as to the manner in which their own company does business in particular, and in addition have a fair knowledge of commercial law. The federation is attempting to do justice to these requirements through special courses of instruction for workmen delegates to boards of directors, and the publication of a special periodical (*Zeitschrift für Betriebsräte*) devoted to the practical and theoretical education of the works council members. This journal is published fortnightly and is furnished to the 30,000 works councils of the metal industry either gratuitously or for a small subscription fee. Each issue contains articles on technical management, production, legal problems, court decisions, and the practical experiences of works councils. This journal has become the intellectual bond of the works councils in the metal industry and their most valuable source of information.

All this, however, describes only in part the educational activities of the federation. Nearly every one of the local unions has its own library from which members may borrow, free of charge, technical, economic, sociopolitical books and works of fiction. In small localities the library of the metal workers' union has generally been combined with that of the other trade-union groups. This combining of the books and funds makes possible for even small local unions the employment of a salaried librarian. The educational activities of the local unions can not very well be described separately, since they are closely connected with those of the local trade-union councils. This is particularly so in the case of all sorts of courses of instruction, theatrical performances, visits to factories and museums, etc.

Policies of the Federation.

Industrial Organization.

OF THE 7,895,065 members of the German Federation of Labor (*Allgemeiner Deutscher Gewerkschaftsbund*), 20.5 per cent belong to the Metal Workers' Federation. It is obvious that an affiliated organization whose membership forms such a large percentage of the central organization exercises considerable influence upon the policies of organized labor. At times its influence is even greater than its

numerical strength would indicate, owing to the fact that a large number of its members are members of the Reichstag and State diets, editors of political journals, officers in cooperative societies, delegates to political congresses, etc.

A very important principle of the program of the Metal Workers' Federation aims at the strengthening of the trade-union movement through uniform organization and a unified spirit. That, of course, is the aim of all German unions, but they have differing methods of achieving it. The Metal Workers' Federation, and with it several other organizations, proposes to attain that aim by creating large industrial federations.

Organized labor in Germany suffers from a splitting up into many groups, which has been brought about by half a century's evolution. The membership of the German Federation of Labor is distributed among 49 national unions, but 15 national unions with over 100,000 members each comprise 86.6 per cent of the total membership, while the remaining 13.4 per cent consists of 34 smaller national unions, each of which is fully autonomous and possesses an extensive administrative organization, executive committee, official organs, etc., and holds its own congresses. There are enterprises, such as shipyards, automobile factories, steel works, etc., in which 15 different unions compete for members, or in which, in case of wage negotiations, the representatives of 15 or more labor organizations demand to be recognized, while the employers are represented by only one organization. Propaganda and wage negotiations by such a multiplicity of trade-union organizations give rise to continuous discord and financial waste, which the Metal Workers' Federation, an industrial union in the fullest sense, would like to see avoided. It proposes that this shall be done through amalgamation of the small national unions, or, in other words, through transformation of the 49 national unions into a much smaller number, say about 15 industrial unions.

The problem of this transformation was thoroughly discussed by the congress of the German Federation of Labor held at Leipzig in 1922. The metal workers, who form the vanguard of the advocates of industrial unionism, proposed adoption of the following resolutions:

Centralized industrial unions shall be recognized or created for large allied industries, such as the mining, smelting, and metal industries; building trades; textile industries; printing; leather industry; transport and communication; woodworking; public establishments; foodstuff industries; and agriculture and forestry, inclusive of viticulture and gardening. This shall be effected through the amalgamation of existing trade organizations. The congress charges the executive committee of the federation to work out, in the shortest possible time, a plan providing for an organic structure of industrial unions and for the demarcation of their jurisdiction. This plan shall be submitted to the unions most closely concerned for further deliberation.

This resolution was adopted by a vote of 465 to 163. The adoption of the resolution has, of course, not led to an immediate realization of the desired reorganization of the German trade-unions on an industrial basis, for tradition, custom, and the peculiar nature of certain trades form obstacles that can not be overcome by a simple resolution. Nevertheless, the Metal Workers' Federation believes that it has won a great moral victory, since the resolution signifies the acknowledgment of its basic principle by the highest authority of the German trade-union system, an acknowledgment that is apt greatly to promote the ultimate realization of industrial unionism.

As a matter of fact, the idea of amalgamation has again become very active since the above decision of the trade-union congress, and several craft unions have already amalgamated with their larger sister organizations.

Industrial Democracy.

Another and still more important plank in the platform of the Metal Workers' Federation is that of "industrial democracy." The road to it has been opened in republican Germany through the constitution and by law. As is generally known, the workers in every German factory have during the last four years had the legal right of determining, through a works council, conjointly with the employer, their working conditions. The new rights obtained under this law will lead to actual industrial democracy only if the custodians of these rights, the works councils, demonstrate their ability to make proper use of them. Fully aware of this fact, the trade-unions have turned their full attention and efforts to the intellectual and moral strengthening of the works councils. The Metal Workers' Federation has shown the greatest zeal in this respect, for it knows that the most difficult part in the realization of industrial equality falls on its shoulders, since the metal industry forms the iron backbone of German industrial life. Still, industrial democracy, although in itself of great importance to the working class, is for the Metal Workers' Federation only a means of achieving its supreme aim, the socialization of industry. This aim comes to the fore in all its deliberations and in many of its resolutions. Thus it says in the resolution in which the last congress (1921) of the federation determined its policies:

The solution of the world crisis can be effected only through socialization * * *. The Metal Workers' Federation is called to cooperate in a leading manner in the achievement of socialization. In order to render this cooperation efficient the congress * * * declares indispensable:

The organization of all manual and intellectual workers,

The exploitation of all possibilities for promoting the interests of the metal workers,

A well-built system of works and economic councils which does not erect barriers to the development of the influence of the workers upon the process of production,

The training of the workers for the accomplishment of their tasks under a régime of socialization.

This political pronouncement expresses the opinion of all lines of thought and of all crafts represented in this gigantic trade-union. Its members may at times have differing views on this or that question, but in striving for socialization, their supreme aim, they are always in accord. It is true that in none of the resolutions of the federation has anything definite been said about the practical form of this high aim. Such a statement seems to be considered premature or superfluous at the present time. Instead of dwelling upon the ultimate but still far-removed aim, hand and mind are working in achieving the prerequisites for the attainment of this aim, which will require great effort and much time.

Land Law of Esthonia.¹

By ANDREW PRANSPILL.

UP TO the middle of the last century practically all the land in Esthonia was owned by German landlords, the native Esthonians living either on the baronial estates as laborers or on small tenant farms, the rent for which they paid to the manor with labor, field products, hides, flax, wool, cloth, and the like. The Germans had gained their foothold in Esthonia in the beginning of the thirteenth century through the invasion of the Teutonic Knights, who conquered and Christianized the country. Cities were founded, fortresses were erected, and the land was colonized by the Germans, who enslaved the native population. Later Esthonia was conquered by the Polish and Swedish kings, and during the reign of Peter the Great (1672-1725) it became a Province of Russia.

When the Russian czars freed the Esthonian serfs a contractual relation was introduced between the landlord and his former serf. This made the condition of the peasant in many respects worse than it had been, as the landlord could oust the peasant at his pleasure, which he had not done before because it was to his interest to take care of his serfs. When it became profitable to grow potatoes and flax on a large scale the landlords increased their acreage at the expense of the small tenancies. Whole villages were torn down and their area converted into large fields attached to the baronial estates. Where the fields extended too far from the dwellings of the laborers, new estates parallel to the principal ones, known under the name of "karjamois," were founded, which usually stretched for several miles.

The small tenant farmers, thus driven out of their homes, were forced to start again on poorer land, in woods, near marshes, and on low lands. This destruction of the small tenancies created the first acute land famine in Esthonia and with it the first large body of landless peasantry.

In 1849 the Russian Government approved the peasant law (*talurahwa seadus*), which, among other things, fixed the boundaries of the large estates and the small tenancies, seeking to end the destruction of the small farms. It also limited the obligations imposed upon the tenants by their landlords. The laborers of the large estates were to be given a small patch of land to cultivate for their own use. Not until 1868 did money rent take the place of the former feudal obligations, but the money rent and free contract produced other evils. As soon as the tenant improved his land and increased its productivity, the landlord demanded a higher rent.

After the peasants were freed, very few of their holdings were sold to them outright. Between the years 1823 and 1849 only 35 farms were sold to the peasants. After the middle of the century, however, they were able to buy farms in greater numbers, as at that time the barons began to construct modern and costly dwellings and lead

¹The data on which this article is based are from *Eesti ajalugu* by M. Kampmann (pp. 144-147, 174-181); *The Esthonian Economic Bulletin*; *Die Agrarreform in Eesti*, by G. E. Luiga; *Esthonia, A Second Belgium*, by Prof. A. Piip, reprinted from the *Contemporary Review*, September, 1918; *Wabadussoda, kui Eesti-rahwa aate teostaja Kodaniku Wäike käsiraamat*, 1922, by I. Soots (pp. 11-22); *The Baltic Review*, January, 1921 (pp. 235-238); *Eesti statistika kuukiri*; *Bulletins of the Ministry of Foreign Affairs of Esthonia*.

more luxurious lives, for which they needed ready money, and this could best be realized from the sale of the small tenant farms. Those peasants who bought their farms early, at favorable terms, soon paid up their debts and became independent economically. In northern Esthonia sales were slow on account of the poverty of the population and because of false rumors that the Czar would give land free of charge. Up to 1904 only 42 per cent of the small tenant farms in the Reval (Tallinn) district had been sold, while in the south 85 per cent had been sold.

Rise of Esthonia as an Independent State.

WHILE the sovereigns of Esthonia changed from time to time, the condition of the Esthonians and their relation to their German landlords remained the same, that of serfs of the feudal lord. Feudalism reigned until the first half of the nineteenth century, and it remained for the land law of 1919 to wipe out the last remnants of feudalism in Esthonia.

When the czarist Government of Russia fell and the provisional government under Kerensky came into power, Esthonia was promised autonomy as one of the States of the new Russian Federation and was allowed to elect a national council or diet (*maapaew*). Before the representatives of Esthonia could work out a plan for self-government, however, the Bolsheviki overthrew the government of Kerensky and with the aim of putting their dictatorship of the proletariat into effect began to interfere with the work of the Esthonian National Council. As a result of this interference the National Council on November 15, 1917, declared itself to be the sovereign authority in Esthonia, and on February 24, 1918, declared Esthonia to be an independent democratic republic.

In the spring of the same year German troops occupied Esthonia with the consent of the Bolsheviki, intending to make Esthonia a Province of Germany. Companies were formed for the colonization of Esthonia, one-third of the shares being held by the German Empire and two-thirds by the Germans and their organizations in Esthonia, although of the total population of Esthonia, 1,100,000, over 90 per cent were Esthonians and only some 5 per cent were Germans.

The German troops remained in Esthonia for eight months and the population suffered much during their occupation of the country. Due to the victories of the Allies on the western front, the Germans were forced to leave Esthonia in November, 1918. But no sooner had the Germans gone than Bolshevik forces invaded Esthonia, it being their aim to force the Esthonians to join their socialist-Soviet Federation and accept the dictatorship of the proletariat.

With the help of the Allies and neighboring friendly States, within two months the invaders were driven beyond the border of Esthonia. The war continued, however, until February 2, 1920, when the Dorpat peace treaty was signed, in which the Russian Government recognized Esthonian sovereignty over the people and land of Esthonia and promised to pay to Esthonia 15,000,000 gold rubles, besides giving Esthonia certain concessions for forests.

Reasons for Passage of Land Law.

WHILE Esthonia was fighting with the Bolshevik in the summer of 1919 a German army was formed in Courland, which overthrew the democratic government of Latvia and set up a new one composed of Germans and the pro-German element in Latvia. This army, known in Esthonia as the Landwehr, was organized principally at the instigation of the German barons in the Baltic Provinces, who, fearing the loss of their power with the rise of the new independent Baltic States, sought to annex these Provinces to the German Empire. The army was formed partly of German troops and partly of the pro-German element in the Baltic Provinces, and the soldiers were promised land after the close of the war.

This army began to advance northward, getting behind the Esthonian forces and attacking them from the rear, while they were defending their native land against the superior forces of the Russians. The Landwehr was quickly defeated and driven back, and most of the German barons still living in Esthonia, fearing for their lives, left the country.

On October 10, 1919, the Esthonian National Council passed the land law. The act grew out of political and economic necessity, but the land decrees of the Soviet Government were the immediate occasion for its passage. The land problem of Esthonia was urgent, and as the Russian soldiers had been promised land the Esthonian Government had to do something for the landless population of Esthonia to save her troops from communist demoralization.

The land problem had been a most acute problem for more than a generation. When the laws gave the peasants the right to emigrate beyond the boundaries of their own Province a large number emigrated to Siberia, Caucasus, Crimea, and the interior of Russia. It is estimated that about a quarter of a million Esthonians emigrated to Russia, all of whom prospered. Since the advent of the Soviet Government, however, a large number have been forced to return to their native land.

When the Esthonian land law was passed 2,428,087 hectares (5,868,686 acres), or 57.9 per cent of the agricultural land, belonged to the large estates, and 1,761,015 hectares (4,256,373 acres), or 42.1 per cent, to the small farmers. The large estates comprised 1,149 separate estates, the property of about 250 German families, while the minor portion of the land was owned by 51,140 small farmers.

Esthonia is an agricultural country and farming is the chief occupation of a majority of those gainfully occupied. The large estates were worked by hired laborers, usually married people, who received their pay partly in money and partly in provisions, with the right to keep a cow, a pig, and a few sheep. The husband was bound to work 300 days a year on his landlord's estate, and the wife was also bound to work a specified number of days a year when called upon by the landlord. The usual working hours before the war in summer were from sunrise to sundown, which meant from 4 a. m. till 9 p. m., and in winter were from 6 a. m. to 6 p. m., with two hours for dinner between 11 a. m. and 1 p. m.² In summer one hour was allowed for breakfast, at 8 a. m., and two hours for dinner, from 2 to 4 p. m.

² The writer has personally worked these hours in Esthonia.

Farmers who were unable to work all their land themselves usually rented part of it or leased it on what is known in Esthonia as the "half-grain" basis (*pooleterake*). Under this arrangement the owner furnished the seed and the tenant worked the land, using his own implements. After the harvest the owner received the same measure of seed that was furnished in the spring, and the rest of the harvest was divided equally between the owner and the tenant.

Provisions of Land Law.

ACCORDING to the land law of October 10, 1919, the following lands were confiscated and declared the property of the State:

1. All baronial estates, including their small tenancies not yet sold;
2. All church estates, and farms belonging to the church which were rented;
3. All lands belonging to the Russian Government and to the Farmer's Bank.

The owners were to be reimbursed for their property in accordance with a special law, to be worked out in the future. The live stock, farm implements, and the rest of the equipment were to be paid for according to their valuation in 1914. The Esthonian Government has already paid the owners for all movable property, but not for the land, the law for that purpose not having yet been worked out.

The land law confiscated altogether 2,346,494 hectares (5,671,476 acres) or 96.6 per cent of the large holdings. Lands belonging to the cities and certain useful social institutions were not confiscated. Their total acreage is 81,593 hectares (197,210 acres). Of the confiscated land 28.3 per cent was to be parceled out as small farms of 20 to 40 acres (enough to support a family), 23 per cent was to be left in the hands of the former tenants, and 48.7 per cent, forest lands chiefly, was to be placed under the Ministry of Forestry.

The allocation of the land was left to the Ministry of Agriculture. The Government surveyor was to submit a plan after a careful study of the local conditions in each district, after which local boards composed of representatives of the local population were to consider the applications in their legal order. Provision was made for appeals from the decisions of the local boards.

Land was to be given principally to those engaged in farming who did not own any land or owned less than was necessary for the support of a family. Speculation and the subletting of the land were prohibited.

The following was the order of priority among applicants to be followed in distributing the land:

1. Small tenants of the former large estates who were in actual possession of their tenancies at the time the law was passed. They were to keep their holdings.
2. Veterans who had been cited for bravery in the war of independence, had been decorated with the cross of the Republic, and during the war had been promised land as an honorary gift from the State.
3. Veterans who had been cited for bravery in the war and to whom the Government had promised to give land without cost.
4. Disabled veterans who had lost over 40 per cent of their working power and who had been decorated with the cross of the Republic.
5. Veterans who had taken part in the actual fighting on the front.
6. Disabled veterans who had lost over 40 per cent of their working power.
7. Families of the veterans.
8. Veterans, according to the length of time in actual service.
9. All other applicants.

[754]

Those enumerated under clauses 2 to 8 had the right to apply for land also in districts in which they did not reside, in which case their allotments there were not to exceed 50 per cent of their whole allotments.

The land was to be given on the basis of a six-year lease, later to be extended to a life-term lease, and the tenants were to pay their rent directly to the State. A special commission was to determine the value of the land for rental purposes, basing their calculations on the valuation statistics of 1901 and 1906, the rent to be paid at the rate of 5 kilograms of rye where one ruble had previously been paid. The price of a kilogram of rye was fixed at 10 marks for continental Esthonia and at 7.5 marks for the island of Oesel.

The tenant was to be required to work his land according to the requirements of good husbandry. He was to have no right to dispose of manure or cattle feed except on his own land. He could make improvements on the land for which he was to receive a just compensation at the expiration of the lease if he wished then to leave. On the other hand, the State reserved the right to evict the tenant if he did not live up to the terms of the contract, if he cut State forest trees without authorization, if he failed to take proper care of the property and the buildings, or if he failed to pay his rent for two terms in succession.

The buildings on the property were to be sold to the tenants, who were to pay down 10 to 50 per cent of their value, the remainder to be paid during a 10 to 20 year period. Those who wished to rent the buildings were to pay 4 per cent of their value as annual rent, with an additional charge for depreciation. The tenants were to be allowed to cut State forest trees for building purposes, under special regulations.

The farm implements and other equipment on the large estates were to be sold to the tenants on a cash basis, their value to be fixed by a representative of the Ministry of Agriculture, the district representatives, and the local officials.

Since there were not enough buildings available to accommodate all the new tenants and to meet the requirements of their individual households, it was necessary to erect a number of new buildings on each large estate, which necessitated extensive building loans. At the end of 1923 the tenant farmers were indebted to the Government as follows: For farm implements, 96,000,000 marks; on the buildings bought, 23,000,000 marks; for building material, 54,400,000 marks; for loans granted to buy farm implements, 1921 and 1922, 60,000,000 marks; for loans granted to buy farm implements in 1923, 25,000,000 marks; for building loans of 1922, 87,000,000 marks; and for building loans of 1923, 200,000,000 marks.

The loans to the tenants to buy the farm implements were from 20,000 to 30,000 marks each and bore $5\frac{1}{2}$ per cent interest, the first installment of the debt to be paid in 1923, and the principal to be paid up in five years.

For building purposes loans were made up to 30 per cent of the value of the building to those who bought their own material and up to 50 per cent to those who obtained the material from the State on credit. The debt on wooden buildings was to be refunded in 20 years and on stone buildings in 40 years. Those on whose land there were not the necessary buildings were to be given priority in procuring loans. The payment of interest on building loans was to begin the third or fifth

year. The law also prescribed the length of time within which the buildings were to be completed. All the tenants were required to insure their buildings against fire.

The land law was so extensive in its scope that it taxed the capacity of all the Government surveyors and land commissions for several years, and it became necessary to make many temporary arrangements in leasing the land. For this reason many large estates were leased temporarily to local farmers and cooperative societies.

Up to September, 1923, 26,416 small farms had been created out of the confiscated large estates, and it was expected that 4,400 more would be parceled out by the end of the year. Stated briefly, the land law of 1919 restored to the native population of Esthonia the land that had been taken away from them by force of arms in the thirteenth century.

Effect of the Land Law.

IT IS hard to estimate correctly the benefits of the land law. Many other important factors must be taken into consideration, as the land law can not be isolated from other laws and acts which have greatly influenced the progress of Esthonia during the short period of her existence as an independent State. It is true that the land and its products are now in the hands of the working population, while in the past the greater part of these was in the hands of a small number of landlords. Whether the small farms will prove to be more efficient and more productive than their predecessors remains to be seen. At the present time the acreage under cultivation in some cases exceeds and in others is under the normal acreage previous to the war. The same can be said about the production. The Esthonians themselves, however, consider the land law a great success.

The total production in 1913, 1921, and 1922 was as follows:

TOTAL PRODUCTION OF AGRICULTURAL LANDS IN ESTHONIA IN 1913, 1921, AND 1922, COMPARED WITH THE AVERAGE FOR 1910 TO 1914.

Product.	Average for 1910-1914.	1913	1921	1922
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Winter rye.....	170, 000	152, 000	169, 800	139, 600
Winter wheat.....	7, 000	6, 800	7, 600	9, 200
Barley.....	114, 800	121, 200	122, 700	143, 200
Oats.....	109, 300	130, 100	159, 000	143, 700
Potatoes.....	754, 800	736, 400	746, 900	706, 700
Linseed.....	12, 500	14, 000	7, 800	8, 200
Flax fiber.....	12, 000	16, 000	6, 600	9, 300

According to the Esthonian Economic Bulletin the crops of rye and wheat in 1922 did not come up to expectations, heavy snows in the winter and a wet summer having spoiled the crops. Potatoes were also spoiled by the wet summer.

The production of flax, although it is showing marked signs of increase, has not reached the pre-war standard. There are several good reasons for this, the main reason being the high wages of farm laborers and the fact that farm hands now receive overtime pay, which was not the case before the war, resulting in the decrease of the acreage under cultivation, since the growing of flax necessitates more labor than any other crop. In 1908 there were 96,187 acres where flax was under cultivation; in 1920, 50,049 acres; in 1921, 49,650 acres; and in 1922, 59,186 acres.

On the whole, it can be said that Esthonia has succeeded in returning to pre-war conditions of living. The best evidence of this is the stable exchange rate of the Esthonian mark, 340 to a dollar for the past three years. It is true that in the beginning of the current year the exchange rate fell to 365 marks to a dollar, but this was due in part to the failure of the crops caused by excessive rains and in part to the inauguration of a free-trade policy which brought about an unfavorable trade balance.

The rapid recovery of the country from the devastation of the war is shown by the State budget. In 1919 the budget closed with a deficit of 93 per cent, but in 1922, instead of an expected deficit, there was a considerable surplus, about one-third of the whole budget. In 1919 the export trade of Esthonia, of which farm products were one of the most important items, amounted to 389,000,000 marks, which increased gradually until in 1922 the exports were valued at 4,800,000,000 marks. In 1919, 1,387 commercial vessels entered the Esthonian ports, in 1922, 4,621, and the figure for 1923 promises to be much higher.

Esthonia has succeeded in making ends meet and at the same time paying some of the debts contracted during the war, and as agriculture is the principal occupation of the country, it may be concluded that this is due principally to the improved position of the Esthonian farmer, made possible by the land law of 1919.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS.

Industrial Relations in the West Coast Lumber Industry.

A STUDY of labor relations in the lumber industry in that part of western Washington and Oregon known as the West Coast, where the Douglas fir is the characteristic timber tree, is presented in Bulletin No. 349, recently issued by the United States Bureau of Labor Statistics.¹

The migratory character of both the lumber industry and its workers and the nature of the industry have made for discontent among the workers, and the 10-hour standard working-day, in effect almost from the beginning of the industry, the fluctuation of wages and their variation from plant to plant, the insanitary camps, lack of family and community life, and unsatisfactory relations with foremen, have all had their effect in producing a very high labor turnover and a hostile attitude between employers and employees.

In an endeavor to discover the ability of the employers to grant the reasonable demands of the workers, the financial organization of the industry has been analyzed. The technology of the industry and the psychology of the workers have been studied for an understanding of the demands of the industry upon the workers and of their social viewpoints, which have influenced their attitude as to organization as a solution of their labor problems.

Attempts have been made through the trade-unions, the I. W. W., the shop-committee plan, cooperation, and the Loyal Legion of Loggers and Lumbermen to reach a solution of industrial relations problems in the industry. In this study their history and influence have been traced and the reactions of the employers described.

The latest development in the field of industrial relations in the industry is the Loyal Legion of Loggers and Lumbermen, or the Four L, as it is commonly called. This organization is an outgrowth of a strike during the summer of 1917, called by the I. W. W. and the trade-unions, into which the Government was brought because the strike interfered with the supply of lumber for one of the war cantonments. After the termination of the strike the Four L was organized by the Government as a patriotic organization to stimulate lumber production for war purposes and for keeping industrial peace. After the war it was reorganized, by vote of employer and employee delegates, as an organization to promote closer relationship between employers and employees, to standardize and improve working and living conditions in the industry, and to provide means for an amicable settlement, on a just basis, of differences between employers and employees. The Four L plan is interesting as an experiment in industrial democracy in an industry where unionization, because of the nature of the industry, has not been strong.

¹U. S. Department of Labor, Bureau of Labor Statistics. Industrial relations in the West Coast lumber industry, by Cloice R. Howd. Washington, 1923. vi, 120 pp. Bulletin No. 349. Miscellaneous series.

It is in reality a large number of shop committees bound together into an industrial council, which determines standards for the industry as a whole, and which seeks to enforce the standards. By covering the whole of a competitive field it seeks to establish standards for the district which shall be just to labor and yet not injure the employer by discriminating between employers. * * * The Four L undertook the task of setting and maintaining standards of wages, hours, and working conditions for the entire region by democratic action in which employers and employees should have an equal voice, and of adjusting on the basis of these standards all difficulties which might arise.

The Four L has been successful in a great measure, the preservation of the eight-hour day, established during the war, being due mainly to its support, while its influence has steadied the market and kept wages higher than they otherwise would have been. Probably its most important achievement has been the adjustment of matters of dispute or possible friction through conference. Its chief danger seems to lie in the ignorance, selfishness, and especially the neglect of those with whom it works. It seems to promise, however, constructive settlement of the majority of the labor problems of the industry.

Work of Railroad Labor Board,¹ April, 1920, to November, 1923.

AT THE end of Federal control of the railroads, March 1, 1920, the Railroad Labor Board began to function in the adjustment of wages and working conditions. The rates of pay and the working rules of every class of employees on all the railroads in the United States were in dispute or about to become so. The calendar of the board's work was not therefore a matter of gradual growth, but it commenced business with a docket congested with every form of wage and rules dispute conceivable, involving great sums of money, the industrial contentment of 2,000,000 employees, and the uninterrupted railway transportation indispensable to the welfare of every business and individual.

The reason why such an accumulation of controversies came to the board was that action upon an application for an increase of wages had been delayed by the United States Railroad Administration since the middle of the year 1919, and the bipartisan board failed to reach an agreement on the matter. The representatives of the carriers and the employees likewise failed to agree as to the perpetuation of working rules promulgated during Federal control. It was therefore necessary to submit these questions to some tribunal upon which the nonpartisan public was represented.

The primary purpose of Congress in the enactment of the labor provisions of the transportation act, 1920, was not to have the Government assume the fixing of wages and working rules for railway employees, but to save the public as far as possible from the loss and suffering engendered by railway strikes. The board was not given the power to fix wages and working rules on its own initiative, but only where controversies arose involving these questions. The perfect freedom of the parties to negotiate agreements on all such questions was not curtailed by Congress; on the contrary, the duty of honestly endeavoring to reach agreements before taking arbitrary action was imperatively enjoined upon both management and men.

¹ Statement of Mr. Ben W. Hooper, chairman, Nov. 30, 1923.

There are three phases of the Railroad Labor Board's operations upon which Congress and the public are entitled to accurate information:

- (1) The number of cases handled, i. e., the volume of work done by the board;
- (2) The extent to which the board's decisions—merely advisory as they are—have been respected and obeyed by the carriers;
- (3) The extent to which the board's decisions have been observed or have been struck against by the employees.

These three questions are here treated in the order named.

Number of Cases Handled.

FROM April 1, 1920, to November 1, 1923, 12,270 disputed questions were referred to the Railroad Labor Board. Of these, 10,671 have been disposed of. Of the total number of disputes 857 did not reach the status of regularly docketed cases. The cases regularly docketed, as in a court, number 11,413. Of these, 9,918 have been disposed of. In some instances, cases involving the same general question of wages or rules were consolidated under one docket and decision number.

The board is sometimes criticized for lack of promptness in handing down its decisions, but it has been a physical impossibility to keep its calendar cleared. It is, however, now closing cases more rapidly than new ones are filed and will soon catch up with its work.

Have the Carriers Violated?

THE success of the work of the Railroad Labor Board must necessarily be measured by the extent to which its decisions have been respected by both parties, taking into consideration, of course, the abnormally difficult conditions under which it has operated so far.

There are in the United States 201 Class I carriers—big roads with large numbers of employees for the most part highly organized.

Upon formal investigation the board has found and declared that 25 of the 201 Class I carriers have violated one or more decisions of the board.

The majority of these violations resulted from the action of carriers in entering into contracts with outside corporations or individuals for the performance of work ordinarily done by certain classes of the railway employees. These cases can hardly be characterized as willful and unquestioned violations of the board's decisions, inasmuch as the contracts were entered into under a claim of right, and the legal question involved is now before the Federal courts for adjudication. It must also be noted that after the board decided that such contracts could not operate to change arbitrarily the established rules and wages of the employees, all but a few of the carriers implicated withdrew from their objectionable contract. If, in view of these facts, the so-called contract cases be omitted from the calculation, there remain only 8 Class I carriers that have been found to have violated the board's decisions.

To what extent these 8 carriers have conformed to the board's decisions after having been formally declared to be violators is not fully known to the board. Some other carriers have been charged with violations of the board's decisions, but the board has not yet investigated and passed upon such charges.

Violations by Employees.

VIOLATIONS of the transportation act, 1920, or of the decisions of the Railroad Labor Board by the employees have been infrequent. In fact, there is only one way in which the employees can violate the act or the board's decisions, and that is by the drastic method of the strike. If they should violate otherwise, they would be subject to discharge from the service. Therefore, when one asks how many times the employees have violated, one is virtually asking how many times they have struck.

The strike on the Atlanta, Birmingham & Atlantic Railroad grew out of a peculiar situation wherein a Federal court authorized a receiver to reduce wages below those fixed by the board and the men struck against the court's action and in support of the board's decision.

The outlaw switchmen's strike of 1920 was under headway before the Railroad Labor Board had organized.

The strike on the Missouri & North Arkansas Railroad might be classed as a violation of the board's decision, but the employees claim that the carrier in the first instance violated a decision and that they subsequently refused to accept one.

The only case in which the employees have violated the transportation act, 1920, in a direct and absolute manner was in the recent strike of the engineers and firemen on the Virginian Railway. In this case they ignored the imperative provisions of the act by failing to first submit their grievances to the board before striking. They did, however, appear and present their side of the controversy when the board had assumed jurisdiction and cited them and the carrier.

In October, 1921, the train and engine brotherhoods took a strike vote and were in the act of calling a nation-wide strike when they desisted at the last moment as a result of the intervention of the board. This would have been the most disastrous strike that our country ever saw.

The clerical employees represented by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees struck on the Norfolk & Western Railroad and on the Chesapeake & Ohio Railroad during the shop strike.

In the case of the shop strike of July 1, 1922, the shopmen did not by striking violate the transportation act. They went through all the procedure commanded by the law up to a final decision of the board and then exercised their lawful right to decline to accept the board's decision. Their act was as lawful as that of any carrier that violated a final decision of the board.

This strike wrought great injury to the carriers, the employees, and the public. The shopmen lost much and won nothing by it.

It is worthy of note that no railway strike has succeeded since the creation of the Railroad Labor Board, and that for this reason the number of strikes compared with the immense number of controversies settled is infinitesimal.

As the only railroad strike of any magnitude which has occurred against a decision of the board, the shop strike has really served a useful public purpose, notwithstanding its disastrous effect. It has strengthened the transportation act by demonstrating that a railroad strike can not succeed against public sentiment, and that public

sentiment is likely to support the decisions of a tribunal fairly constituted upon which the public is represented.

It required one good-sized strike to make manifest the power of public sentiment behind the decisions of the board. The motive of those who now contend that the public should not be represented on such a board is quite obvious.

The decisions of a board composed only of representatives of the carriers and employees would often arouse the suspicion of collusion and would command no more public confidence than do the maneuvers of the coal operators and the miners. This fact was recognized by Congress when it wrote into the transportation act, 1920, the provisions that wage disputes should not be decided without the concurrence of at least one public member of the board.

Now, there are certain interested individuals who want a board without public representation.

When such a bipartisan board agreed upon important matters, the cost would be passed on to a suspicious public. When it disagreed, and a strike resulted, the public would never know which party was in the wrong and public sentiment could not be definitely brought to bear on the situation.

Negro Migration in 1923.

DURING the year ending September 1, 1923, according to data collected by the late Phil H. Brown, commissioner of conciliation of the Department of Labor, the negro migration from 13 Southern States reached a total of 478,700. This conclusion is drawn from figures furnished by State, municipal, and civic statisticians and officials. The following table shows the colored population of each of these States, the number of colored migrants, the proportion that these formed of the colored population, and the proportion that each State furnished of the total migration for the year:

NEGRO POPULATION AND NUMBER AND PER CENT OF NEGRO MIGRANTS, BY STATES, AND PER CENT MIGRANTS OF EACH STATE FORMED OF TOTAL MIGRATION, YEAR ENDING SEPTEMBER 1, 1923.

State.	Colored population.	Colored migrants.		
		Number.	Per cent of colored population.	Per cent of total colored migration.
Alabama.....	900,652	90,000	10.0	18.8
Arkansas.....	472,220	5,000	1.1	1.1
Florida.....	329,487	90,000	27.3	18.8
Georgia.....	1,206,365	120,600	10.0	25.2
Kentucky.....	235,938	2,500	1.1	.5
Louisiana.....	700,257	15,000	2.1	3.1
Mississippi.....	935,184	82,600	8.8	17.3
North Carolina.....	763,407	25,000	3.3	5.2
Oklahoma.....	149,408	1,000	.7	.2
South Carolina.....	864,719	25,000	2.9	5.2
Tennessee.....	451,758	10,000	2.2	2.1
Texas.....	741,694	2,000	.3	.4
Virginia.....	690,017	10,000	1.4	2.1
Total.....	8,441,106	478,700	5.7	100.0

This table seems to show that while the boll weevil may have played an important part in causing the migration, as has been held to be the case in at least one State,¹ it is by no means wholly responsible, since proportionately the migration is as large from noncotton-raising States as from those in which the weevil's depredations are changing the whole agricultural program. Among the cotton-raising States, Georgia shows a larger proportionate migration than Mississippi and a much larger one than Louisiana or either of the Carolinas. The relatively small migration from Texas and Oklahoma may have some connection with the long and troublesome journey involved.

In the spring of 1923 an effort was made to learn where the migrants were going and what proportion of skilled workers were included in their ranks. Pay-roll data were secured from 273 employers of negro labor in California, Connecticut, Delaware, Illinois, Indiana, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Missouri, New Jersey, New York, Ohio, Oklahoma, and Wisconsin. A special study was made of a group of 19,747 negroes among the whole number of 60,421 employed on April 30, 1923, particularly as to the number whom employers could positively identify as having moved northward into employment during the past year. It was found that 4,702 or 23.8 per cent had come direct from the South during the year. Taking the whole group and allowing for those who could not be definitely assigned, the conclusion was reached that the distribution of migrants among the States listed can be approximately indicated by the following percentages:

	Per cent
Ohio.....	37. 26
Pennsylvania.....	21. 63
Michigan.....	10. 53
New Jersey.....	6. 40
New York.....	4. 76
Missouri.....	4. 74
Illinois.....	4. 49
Kentucky.....	4. 36
Connecticut.....	3. 04
Maryland.....	1. 30
Wisconsin.....	. 85
California.....	. 32
Oklahoma.....	. 26
Nondistributable.....	. 06
Total.....	100. 00

It will be noticed that several of the States in this list are distinctly southern, and that one or two appear in the list of States from which migration is in progress. The department calls attention to the fact that the migration is a continuous process. Immigrants from the far South move northward, work in their new location for a time, and then move on until they reach the North, while new migrants fill their places as they move on. This is particularly noticeable along the border. "The reports indicated that migrants frequently come to border States, and after working a while use a portion of their earnings to remove to points of vantage farther north. This particular feature is, perhaps, largely productive of causes of turnover, which was not strongly noticeable in the States farthest north."

¹ See MONTHLY LABOR REVIEW for January, 1924, pp. 32-35: "Negro migration from Georgia."

The 273 employers listed with the department had 60,421 colored workers on their pay rolls on April 30, 1923. An effort to learn what proportion of these were migrants led to the following conclusions:

	Per cent of migrants among workers studied.
New Jersey.....	62. 19
Oklahoma.....	54. 54
Michigan.....	52. 27
Ohio.....	36. 01
California.....	30. 00
Pennsylvania.....	29. 82
Connecticut.....	20. 82
Missouri.....	19. 08
Wisconsin.....	19. 14
Kentucky.....	14. 91
Maryland.....	12. 03
New York.....	11. 88
Illinois.....	5. 17

Unfortunately, the employers in Delaware, Indiana, Kansas, Massachusetts, and West Virginia, did not furnish reports on this point so these States are omitted from the list. The department feels that the distribution of migrants as shown above points to two conditions which strongly influence the migration—wages and types of employment available in Northern States, and geographical location. "No doubt, direct touch of trunk lines from southern points and the amount of railroad fare required have their effect upon these workers who desire to move northward; and on the other hand distinctive types of work with attractive wages form another inducement."

The classification of the workers as skilled or unskilled showed the following results:

	April 30, 1922.	April 30, 1923.
Skilled workers.....	10, 794	14, 951
Unskilled workers.....	31, 577	45, 470
Total.....	42, 371	60, 421

This shows an increase during the year of 38.5 per cent for the skilled and 44 per cent for the unskilled workers.

High marks were reached in the increase of negro skilled workers who advanced by 186.86 per cent in Maryland; 90.48 per cent in Connecticut; 70.73 per cent in Michigan; 68.97 per cent in Kansas; 68.04 per cent in Ohio; 60 per cent in California; 43.68 per cent in Pennsylvania; 39.94 per cent in Illinois; 33.33 per cent in Wisconsin; 30 per cent in New York; 18.18 per cent in Indiana; and 13.93 per cent in Kentucky. New Jersey and Oklahoma showed respective increases of 12.96 and 3.85 per cent in the number of negro workers taken on in the skilled occupations during the year, while West Virginia showed a loss of 1.82 per cent.

The percentage increase during the year in the number of unskilled colored workers ranged from 15.69 per cent in Oklahoma to 102.86 per cent in Indiana, with Connecticut and New Jersey both showing increases of between 80 and 90 per cent.

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

THE following tables are based on figures which have been received by the Bureau of Labor Statistics from retail dealers through monthly reports of actual selling prices.¹

Table 1 shows for the United States retail prices of food, February 15, 1923, and January 15 and February 15, 1924, as well as the percentage changes in the year and in the month. For example, the price per dozen of strictly fresh eggs was 46.2 cents in February, 1923; 54.6 cents in January, 1924; and 49.8 cents in February, 1924. These prices show an increase of 8 per cent in the year and a decrease of 9 per cent in the month.

The cost of the various articles of food² combined show an increase of 4 per cent February 15, 1924, as compared with February 15, 1923, and a decrease of 1 per cent February 15, 1924, as compared with January 15, 1924.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, FEBRUARY 15, 1924, COMPARED WITH FEBRUARY 15, 1923, AND JANUARY 15, 1924.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (—) Feb. 15, 1924, compared with—	
		Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.
		Cents.	Cents.	Cents.		
Sirloin steak.....	Pound.....	37.1	39.0	38.7	+4	-1
Round steak.....	do.....	31.5	33.3	33.0	+5	-1
Rib roast.....	do.....	27.5	28.6	28.3	+3	-1
Chuck roast.....	do.....	19.5	20.7	20.4	+5	-1
Plate beef.....	do.....	12.8	13.3	13.3	+4	0
Pork chops.....	do.....	28.7	27.4	26.7	-7	-3
Bacon.....	do.....	39.4	37.2	36.6	-7	-2
Ham.....	do.....	45.0	44.7	44.4	-1	-1
Lamb, leg of.....	do.....	36.0	35.9	35.7	-1	-1
Hens.....	do.....	35.5	34.5	35.1	-1	+2
Salmon, canned, red.....	do.....	31.3	31.2	31.2	-0.3	0
Milk, fresh.....	Quart.....	13.7	14.2	14.0	+2	-1
Milk, evaporated.....	15-16-oz. can.....	12.1	12.2	12.1	0	-1
Butter.....	Pound.....	57.7	61.3	60.2	+4	-2
Oleomargarine.....	do.....	29.0	30.6	30.7	+6	+0.3
Nut margarine.....	do.....	26.7	28.9	29.0	+9	+0.3
Cheese.....	do.....	37.5	37.4	37.2	-1	-1
Lard.....	do.....	17.4	18.7	18.0	+3	-4
Vegetable lard substitute.....	do.....	22.4	24.3	24.5	+9	+1
Eggs, strictly fresh.....	Dozen.....	46.2	54.6	49.8	+8	-9
Eggs, storage.....	do.....	42.4	38.6	39.3	-7	+2
Bread.....	Pound.....	8.7	8.7	8.7	0	0
Flour.....	do.....	4.9	4.5	4.6	-6	+2
Corn meal.....	do.....	4.0	4.4	4.4	+10	0

¹ In addition to monthly retail prices of food and coal, the bureau secures prices of gas and electricity from each of 51 cities. These prices are published at quarterly intervals in the MONTHLY LABOR REVIEW. Retail prices of dry goods were published quarterly until November, 1923.

² The following 22 articles, weighted according to the consumption of the average family, have been used from January, 1913, to December, 1920: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea. The remainder of the 43 articles shown in Tables 1 and 2 have been included in the weighted aggregates for each month beginning with January, 1921.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, FEBRUARY 15, 1924, COMPARED WITH FEBRUARY 15, 1923, AND JANUARY 15, 1924—Concluded.

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (—) Feb. 15, 1924, compared with—	
		Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.
		Cents.	Cents.	Cents.		
Rolled oats.....	Pound.....	8.7	8.8	8.8	+1	0
Corn flakes.....	8-oz. pkg.....	9.7	9.7	9.7	0	0
Wheat cereal.....	28-oz. pkg.....	24.8	24.3	24.3	-2	0
Macaroni.....	Pound.....	19.8	19.6	19.6	-1	0
Rice.....	do.....	9.4	9.8	9.8	+4	0
Beans, navy.....	do.....	11.3	10.1	10.0	-12	-1
Potatoes.....	do.....	2.1	2.8	2.8	+33	0
Onions.....	do.....	5.3	6.1	6.0	+13	-2
Cabbage.....	do.....	4.7	4.9	5.4	+15	+10
Beans, baked.....	No. 2 can.....	13.1	12.9	12.9	-2	0
Corn, canned.....	do.....	15.4	15.7	15.7	+2	0
Peas, canned.....	do.....	17.4	17.9	17.9	+3	0
Tomatoes, canned.....	do.....	12.8	12.9	12.9	+1	0
Sugar, granulated.....	Pound.....	8.7	10.2	10.3	+18	+1
Tea.....	do.....	68.9	71.0	70.9	+3	-0.2
Coffee.....	do.....	37.5	38.2	38.8	+3	+2
Prunes.....	do.....	19.9	17.9	17.8	-11	-1
Raisins.....	do.....	18.7	15.9	15.8	-16	-1
Bananas.....	Dozen.....	36.9	38.8	38.1	+3	-2
Oranges.....	do.....	47.1	40.0	39.5	-16	-1
All articles combined ¹.....	.....	.....	.....	.....	+4	-1

¹ See note 2, p. 67.

Table 2 shows for the United States average retail prices of specified food articles on February 15, 1913, and on February 15 of each year from 1918 to 1924, together with percentage changes in February of each of these specified years, compared with February, 1913. For example, the price per pound of hens was 20.7 cents in February, 1913; 36.2 cents in February, 1918; 39.6 cents in February, 1919; 44.7 cents in February, 1920; 42.9 cents in February, 1921; 36.9 cents in February, 1922; 35.5 cents in February, 1923; and 35.1 cents in February, 1924.

As compared with the average price in February, 1913, these figures show the following percentage increases: 75 per cent in February, 1918; 91 per cent in February, 1919; 116 per cent in February, 1920; 107 per cent in February, 1921; 78 per cent in February, 1922; 71 per cent in February, 1923; and 70 per cent in February, 1924.

The cost of the various articles of food combined showed an increase of 52 per cent in February, 1924, as compared with February, 1913.

RETAIL PRICES OF FOOD.

69

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE FEBRUARY 15 OF CERTAIN SPECIFIED YEARS, COMPARED WITH FEBRUARY 15, 1913.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail price Feb. 15—								Per cent of increase (+) or decrease (-) Feb. 15 of each specified year, compared with Feb. 15, 1913.							
		1913	1918	1919	1920	1921	1922	1923	1924	1918	1919	1920	1921	1922	1923	1924	
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.								
Sirloin steak	Pound.	23.9	33.4	41.2	40.6	38.3	35.2	37.1	38.7	+40	+72	+70	+60	+47	+55	+62	
Round steak	do.	20.6	31.4	38.8	37.2	34.2	30.2	31.5	33.0	+52	+88	+81	+66	+47	+53	+60	
Rib roast	do.	18.8	26.3	32.6	31.5	29.3	26.5	27.5	28.3	+40	+73	+68	+56	+41	+46	+51	
Chuck roast	do.	14.9	22.7	27.9	25.1	22.0	18.9	19.5	20.4	+52	+87	+68	+48	+27	+31	+37	
Plate beef	do.	11.3	17.7	21.9	18.4	15.6	12.8	12.8	13.3	+57	+94	+63	+38	+13	+13	+18	
Pork chops	do.	18.9	33.6	37.9	37.7	32.7	29.3	28.7	26.7	+78	+101	+99	+73	+55	+52	+41	
Bacon	do.	25.5	48.4	55.3	50.3	44.7	37.9	39.4	36.6	+90	+117	+97	+75	+49	+55	+44	
Ham	do.	25.4	43.8	51.8	50.7	48.2	46.5	45.0	44.4	+72	+104	+100	+90	+83	+77	+75	
Lamb	do.	18.5	31.4	36.4	39.0	34.2	35.4	36.0	35.7	+70	+97	+111	+85	+91	+95	+93	
Hens	do.	20.7	36.2	39.6	41.7	42.9	36.9	35.5	35.1	+75	+91	+116	+107	+78	+71	+70	
Salmon, canned, red	do.	129.1	31.7	37.6	39.1	32.9	31.3	31.2									
Milk, fresh	Quart.	8.9	13.4	15.5	16.7	15.4	13.2	13.7	14.0	+51	+74	+88	+73	+48	+54	+57	
Milk, evaporated	(2)			16.4	16.2	14.7	11.6	12.1	12.1								
Butter	Pound.	41.2	57.9	57.2	72.6	56.5	45.9	57.7	60.2	+41	+39	+76	+37	+11	+40	+46	
Oleomargarine	do.			39.2	43.4	35.4	28.3	29.0	30.7								
Nut margarine	do.			35.9	36.1	32.3	27.5	26.7	29.0								
Cheese	do.	22.2	34.9	40.9	43.3	38.4	32.9	37.5	37.2	+57	+84	+95	+73	+48	+69	+68	
Lard	do.	15.4	33.0	32.1	32.3	20.7	15.9	17.4	18.0	+114	+108	+110	+34	+3	+13	+17	
Vegetable lard sub- stitute.	do.			33.8	38.1	25.9	21.7	22.4	24.5								
Eggs, strictly fresh	Dozen	31.5	62.7	50.6	68.5	47.9	48.4	46.2	49.8	+99	+61	+117	+52	+54	+47	+58	
Eggs, storage	do.	23.5	54.7	46.8	59.4	44.4	39.1	42.4	39.3	+133	+99	+153	+89	+66	+80	+67	
Bread	Pound.	5.6	9.5	9.8	11.1	10.6	8.6	8.7	8.7	+70	+75	+98	+89	+54	+55	+55	
Flour	do.	3.3	6.6	6.7	8.1	6.5	5.1	4.9	4.6	+100	+103	+145	+97	+55	+48	+39	
Corn meal	do.	2.9	7.0	6.0	6.5	5.0	3.9	4.0	4.4	+141	+107	+124	+72	+34	+38	+52	
Rolls oats	do.			8.4	10.1	10.4	8.9	8.7	8.8								
Corn flakes	(3)			4.1	14.1	14.0	10.3	9.7	9.7								
Wheat cereal	(1)			25.1	29.3	30.0	26.2	24.8	24.3								
Macaroni	Pound.			19.4	20.9	21.3	20.2	19.8	19.6								
Rice	do.	8.6	11.8	14.3	18.3	10.5	9.3	9.4	9.8	+37	+66	+113	+22	+8	+9	+14	
Beans, navy	do.		18.1	13.7	12.2	8.6	8.3	11.3	10.0								
Potatoes	do.	1.5	3.2	3.1	6.0	2.6	3.3	2.1	2.8	+113	+107	+300	+73	+120	+40	+87	
Onions	do.		4.9	4.3	9.3	3.9	10.9	5.3	6.0								
Cabbage	do.			4.3	9.3	3.6	5.7	4.7	5.4								
Beans, baked	(4)			18.6	16.9	15.3	13.3	13.1	12.9								
Corn, canned	(5)			19.6	18.6	17.1	15.9	15.4	15.7								
Peas, canned	(6)			19.2	19.1	18.2	17.8	17.4	17.9								
Tomatoes, canned	(7)			17.0	15.2	12.2	13.4	12.8	12.9								
Sugar, granulated	Pound.	5.5	10.6	10.7	18.8	8.9	6.4	8.7	10.3	+93	+95	+242	+62	+16	+58	+87	
Tea	do.	54.3	60.8	68.4	71.4	71.5	67.8	68.9	70.9	+12	+26	+31	+32	+25	+27	+31	
Coffee	do.	29.8	30.4	36.6	49.1	37.5	35.6	37.5	38.8	+2	+23	+65	+26	+19	+26	+30	
Prunes	do.		16.5	20.3	29.0	22.5	18.8	19.9	17.8								
Raisins	do.		15.0	16.2	25.6	31.9	24.8	18.7	15.8								
Bananas	Dozen			35.0	41.0	41.0	36.8	36.9	38.1								
Oranges	do.			46.8	53.4	45.3	48.5	47.1	39.5								
All articles combined (8)										+67	+79	+108	+63	+46	+47	+52	

¹ Both pink and red.
² 15-16 ounce can.

³ 8-ounce package.
⁴ 28-ounce package.

⁵ No. 2 can.
⁶ See Note 2, page 67.

Table 3 shows the changes in the retail prices of each of 22 articles of food ³ as well as the changes in the amounts of these articles that could be purchased for \$1, each year, 1913 to 1923, and in February, 1924.

³ Although monthly prices on 43 food articles have been secured since January, 1919, prices on only 22 of these articles have been secured each month since 1913.

TABLE 3.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR \$1, IN EACH YEAR, 1913 TO 1923, AND IN FEBRUARY, 1924.

Year.	Sirloin steak.		Round steak.		Rib roast.		Chuck roast.		Plate beef.		Pork chops.	
	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.	Average retail price.	Amt. for \$1.
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913.....	\$0.254	3.9	\$0.223	4.5	\$0.198	5.1	\$0.160	6.3	\$0.121	8.3	\$0.210	4.8
1914.....	.259	3.9	.236	4.2	.204	4.9	.167	6.0	.126	7.9	.220	4.5
1915.....	.257	3.9	.230	4.3	.201	5.0	.161	6.2	.121	8.3	.203	4.9
1916.....	.273	3.7	.245	4.1	.212	4.7	.171	5.8	.128	7.8	.227	4.4
1917.....	.315	3.2	.290	3.4	.249	4.0	.209	4.8	.157	6.4	.319	3.1
1918.....	.389	2.6	.369	2.7	.307	3.3	.266	3.8	.206	4.9	.390	2.6
1919.....	.417	2.4	.389	2.6	.325	3.1	.270	3.7	.202	5.0	.423	2.4
1920.....	.437	2.3	.395	2.5	.332	3.0	.262	3.8	.183	5.5	.423	2.4
1921.....	.388	2.6	.344	2.9	.291	3.4	.212	4.7	.143	7.0	.349	2.9
1922.....	.374	2.7	.323	3.1	.276	3.6	.197	5.1	.128	7.8	.330	3.0
1923.....	.391	2.6	.335	3.0	.284	3.5	.202	5.0	.129	7.8	.304	3.3
1924: February.	.387	2.6	.330	3.0	.283	3.5	.204	4.9	.133	7.5	.267	3.7
	Bacon.		Ham.		Lard.		Hens.		Eggs.		Butter.	
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per dz.	Dz.	Per lb.	Lbs.
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per dz.	Dz.	Per lb.	Lbs.
1913.....	\$0.270	3.7	\$0.269	3.7	\$0.158	6.3	\$0.213	4.7	\$0.345	2.9	\$0.383	2.6
1914.....	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915.....	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916.....	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917.....	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918.....	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919.....	.554	1.8	.534	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920.....	.523	1.9	.555	1.8	.295	3.4	.447	2.2	.681	1.5	.701	1.4
1921.....	.427	2.3	.488	2.0	.180	5.6	.397	2.5	.509	2.0	.517	1.9
1922.....	.398	2.5	.488	2.0	.170	5.9	.360	2.8	.444	2.3	.479	2.1
1923.....	.391	2.6	.455	2.2	.177	5.6	.350	2.9	.465	2.2	.554	1.8
1924: February.	.366	2.7	.444	2.3	.180	5.6	.351	2.8	.498	2.0	.602	1.7
	Cheese.		Milk.		Bread.		Flour.		Corn meal.		Rice.	
	Per lb.	Lbs.	Per qt.	Qts.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
	Per lb.	Lbs.	Per qt.	Qts.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.
1913.....	\$0.221	4.5	\$0.089	11.2	\$0.056	17.9	\$0.033	30.3	\$0.030	33.3	\$0.087	11.5
1914.....	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.088	11.4
1915.....	.233	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916.....	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917.....	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918.....	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919.....	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920.....	.416	2.4	.167	6.0	.115	8.7	.081	12.3	.065	15.4	.174	5.7
1921.....	.340	2.9	.146	6.8	.089	10.1	.058	17.2	.045	22.2	.095	10.5
1922.....	.329	3.0	.131	7.6	.087	11.5	.051	19.6	.039	25.6	.095	10.5
1923.....	.369	2.7	.138	7.2	.087	11.5	.047	21.3	.041	24.4	.095	10.5
1924: February.	.372	2.7	.140	7.1	.087	11.5	.046	21.7	.044	22.7	.098	10.2
	Potatoes.		Sugar.		Coffee.		Tea.					
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.				
	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.	Per lb.	Lbs.				
1913.....	\$0.017	58.8	\$0.055	18.2	\$0.298	3.4	\$0.544	1.8				
1914.....	.018	55.6	.059	16.9	.297	3.4	.546	1.8				
1915.....	.015	66.7	.066	15.2	.300	3.3	.545	1.8				
1916.....	.027	37.0	.080	12.5	.299	3.3	.546	1.8				
1917.....	.043	23.3	.093	10.8	.302	3.3	.582	1.7				
1918.....	.032	31.3	.097	10.3	.305	3.3	.648	1.5				
1919.....	.038	26.3	.113	8.8	.433	2.3	.701	1.4				
1920.....	.063	15.9	.194	5.2	.470	2.1	.733	1.4				
1921.....	.031	32.3	.080	12.5	.363	2.8	.697	1.4				
1922.....	.028	35.7	.073	13.7	.361	2.8	.681	1.5				
1923.....	.029	34.5	.101	9.9	.377	2.7	.695	1.4				
1924: February.	.028	35.7	.103	9.7	.388	2.6	.709	1.4				

Index Numbers of Retail Prices of Food in the United States.

IN TABLE 4 index numbers are given which show the changes in the retail prices of each of 22 food articles,⁴ by years from 1907 to 1923, and by months for 1923⁵ and for January and February, 1924. These index numbers, or relative prices, are based on the year 1913 as 100, and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of rib roast for the year 1920 was 168, which means that the average money price for the year 1920 was 68 per cent higher than the average money price for the year 1913. The relative price of bacon for the year 1919 was 205 and for the year 1920, 194, which figures show a drop of 11 points but a decrease of only 5 per cent in the year.

In the last column of Table 4 are given index numbers showing the changes in the retail cost of all articles of food combined. From January, 1913, to December, 1920, 22 articles have been included in the index, and beginning with January, 1921, 43 articles have been used.⁴ For an explanation of the method used in making the link between the cost of the market basket of 22 articles, weighted according to the average family consumption in 1901, and the cost of the market basket based on 43 articles and weighted according to the consumption in 1918, see MONTHLY LABOR REVIEW for March, 1921 (p. 25).

The curve shown in the chart on page 73 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The retail cost of the food articles included in the index has decreased since July, 1920, until the curve is brought down in February, 1924, to approximately where it was in July, 1917. The chart has been drawn on the logarithmic scale,⁶ because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

⁴ See note 2, p. 67.

⁵ For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19-21.

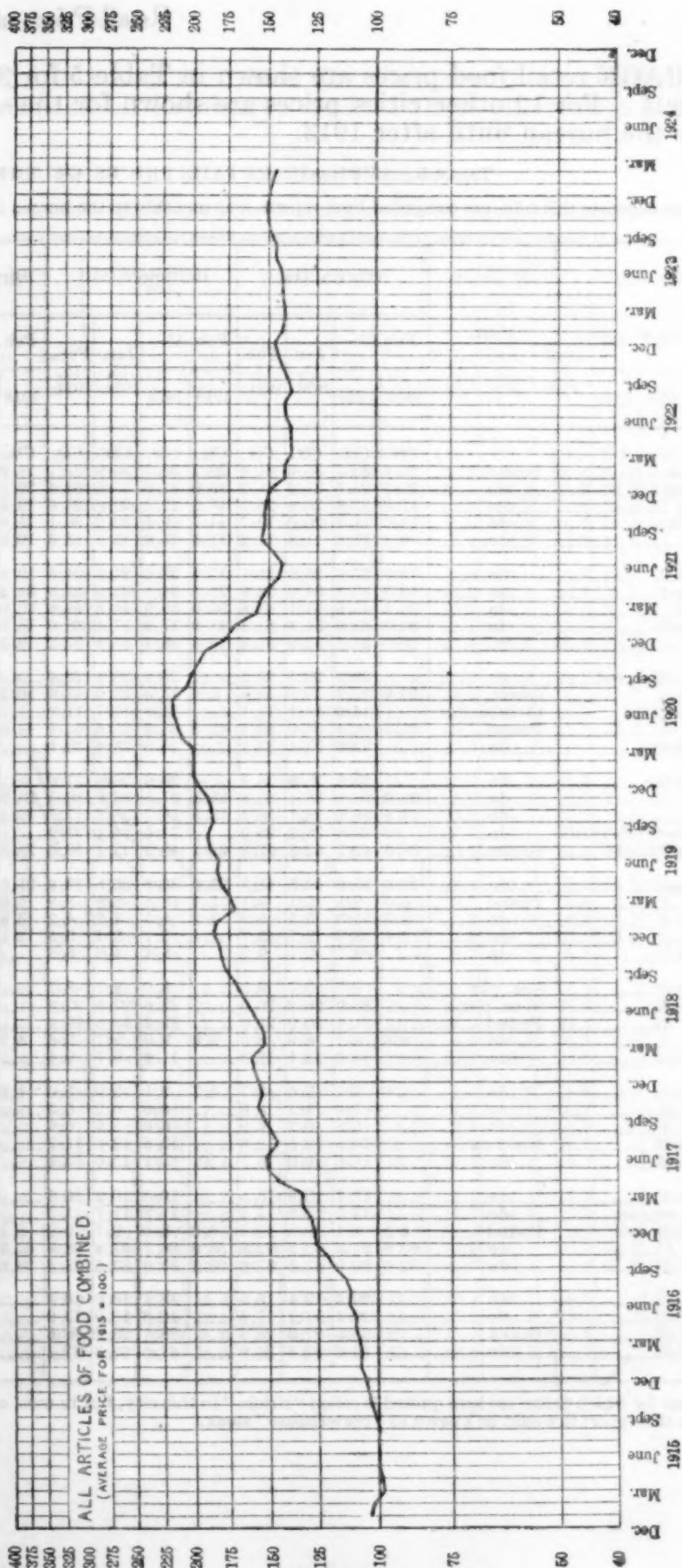
⁶ For a discussion of the logarithmic chart see article on "Comparison of arithmetic and ratio charts," by Lucian W. Chaney, MONTHLY LABOR REVIEW for March, 1919, pp. 20-34. Also "The 'ratio' charts," by Prof. Irving Fisher, reprinted from Quarterly Publications of the American Statistical Association, June, 1917, 24 pp.

TABLE 4.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS, 1907 TO 1923, BY MONTHS FOR 1923 AND FOR JANUARY AND FEBRUARY, 1924.

[Average for year 1913=100.]

Year and month.	Sirloin steak.	Round steak.	Rib roast.	Chuck roast, beef.	Pork chops.	Bacon.	Ham.	Lard.	Hens.	Eggs.	Butter.	Cheese.	Milk.	Bread.	Flour.	Corn meal.	Rice.	Potatoes.	Sugar.	Coffee.	Tea.	All articles combined.
1907.....	71	68	76	74	74	74	76	81	81	84	85	85	87	87	95	88	105	105	105	-----	-----	82
1908.....	73	71	78	76	77	77	78	80	83	86	86	86	90	90	102	92	111	111	108	-----	-----	84
1909.....	77	74	81	83	83	83	82	90	89	93	90	90	91	91	108	94	112	112	107	-----	-----	89
1910.....	80	78	85	92	95	95	91	104	94	98	94	94	95	95	109	95	101	109	109	-----	-----	93
1911.....	81	79	85	91	85	91	89	88	91	94	88	88	96	96	102	94	130	117	117	-----	-----	92
1912.....	91	89	94	91	91	91	91	94	93	99	98	98	97	97	105	102	135	115	115	-----	-----	98
1913.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1914.....	102	106	103	104	105	102	102	99	102	102	94	104	100	113	104	105	101	108	108	100	100	102
1915.....	101	103	101	101	100	100	97	93	97	99	93	105	99	125	126	108	104	89	120	101	100	101
1916.....	108	110	107	107	106	108	109	111	111	109	103	117	102	130	135	113	105	159	146	100	100	114
1917.....	124	130	126	131	132	132	142	175	134	139	127	150	125	164	211	192	119	253	169	101	107	146
1918.....	153	165	155	166	170	186	178	211	177	165	151	162	156	175	203	227	148	188	176	102	119	168
1919.....	164	174	164	169	167	201	190	234	193	182	177	193	174	179	218	213	174	224	205	145	129	186
1920.....	172	177	168	164	161	201	206	187	210	197	183	188	188	205	245	217	200	371	353	158	135	203
1921.....	153	154	147	133	118	166	158	114	180	148	135	154	164	177	176	160	109	182	145	122	128	133
1922.....	147	145	139	123	106	137	147	181	169	129	125	149	147	155	155	130	109	165	133	121	125	142
1923: Av. for year.....	154	150	143	126	107	145	145	169	112	164	135	145	167	155	142	137	109	171	184	127	128	146
January.....	146	142	139	123	107	140	147	168	110	162	161	154	154	155	148	133	109	124	151	124	126	144
February.....	146	141	139	122	106	137	146	167	110	167	134	151	170	154	148	133	108	124	158	126	127	142
March.....	147	142	139	122	106	136	145	167	110	168	112	150	153	155	145	133	108	129	185	127	127	142
April.....	149	145	140	123	105	135	145	168	111	169	100	150	153	155	148	133	108	147	193	128	127	143
May.....	152	148	142	124	105	143	145	168	109	170	102	136	161	152	145	133	108	159	204	128	127	143
June.....	158	155	145	128	104	142	144	169	109	166	103	131	163	152	145	133	108	188	202	127	128	144
July.....	161	159	148	130	106	149	145	171	108	163	128	164	153	157	142	137	108	247	191	127	128	147
August.....	162	159	147	130	105	153	145	172	108	162	120	135	154	156	136	137	108	218	175	126	128	146
September.....	162	159	148	131	108	175	146	178	113	164	141	144	167	155	136	140	109	200	175	126	128	149
October.....	158	154	146	130	108	163	146	172	118	163	138	147	158	155	139	143	110	171	193	127	129	150
November.....	153	148	143	128	107	138	148	169	120	158	192	164	171	161	155	139	147	153	187	127	129	151
December.....	152	148	143	128	107	136	166	120	157	188	157	171	161	155	136	147	111	153	189	127	129	150
1924: January.....	154	149	144	129	110	130	166	118	162	158	160	169	160	155	136	147	113	165	185	128	131	149
February.....	152	148	143	128	110	127	165	114	165	144	157	168	157	155	139	147	113	165	187	130	130	147

TREND IN RETAIL PRICES OF FOOD FOR THE UNITED STATES, JANUARY, 1915, TO FEBRUARY, 1924.



Retail Prices of Food in 51

AVERAGE retail food prices are shown in Table 5 for 39 cities for 1924. For 12 other cities prices are shown for the same dates, used by the bureau until after 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL

[The prices shown in this table are computed from reports sent monthly to the bureau by retail dealers.]

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.
		1913	1923			1913	1923			1913	1923		
Sirloin steak	Pound	22.6	32.7	35.6	34.4	20.7	35.7	36.9	37.1	24.9	33.6	36.6	36.5
Round steak	do	20.5	29.5	31.2	31.2	19.0	32.8	33.6	33.4	20.1	29.3	32.6	32.3
Rib roast	do	17.0	25.8	26.4	25.5	17.3	29.1	29.6	29.5	19.3	25.8	26.5	25.6
Chuck roast	do	13.0	18.8	20.0	19.7	14.7	19.5	20.2	20.1	15.6	20.3	21.4	20.9
Plate beef	do	9.8	11.2	11.8	11.2	11.6	13.0	13.2	13.3	10.0	12.4	13.6	13.3
Pork chops	do	19.5	27.6	25.9	25.1	17.3	28.5	24.8	24.5	19.4	28.8	27.0	26.5
Bacon, sliced	do	30.0	35.8	34.0	32.9	21.3	34.5	33.0	32.3	31.3	40.7	38.6	38.2
Ham, sliced	do	28.5	45.0	44.1	43.8	30.0	50.9	49.6	48.8	30.0	45.5	43.8	44.0
Lamb, leg of	do	20.0	35.9	34.4	33.3	18.0	37.9	37.4	38.0	18.8	36.3	38.2	37.0
Hens	do	20.0	31.1	32.9	31.4	19.8	38.4	35.6	37.2	19.3	31.4	31.2	31.7
Salmon, canned, red	do		29.1	29.5	29.5		26.6	26.4	26.4		50.0	30.2	30.0
Milk, fresh	Quart	10.9	16.7	19.3	19.3	8.8	13.0	13.0	13.0	10.3	19.0	19.0	18.5
Milk, evaporated	15-16 oz. can		14.0	14.1	14.1		11.9	11.7	11.9		13.4	13.2	13.2
Butter	Pound	41.7	58.1	58.9	59.3	42.3	63.0	65.6	65.4	44.0	60.7	61.7	62.3
Oleomargarine	do		32.0	33.1	33.1		25.8	28.4	28.1		33.3	34.3	34.5
Nut margarine	do		26.3	28.8	28.4		26.9	26.8	27.0		31.1	33.2	33.3
Cheese	do	25.0	36.5	36.1	35.8	23.3	37.5	36.8	36.5	23.0	37.2	37.0	37.7
Lard	do	14.8	18.0	18.7	18.1	13.5	16.7	18.3	17.7	15.4	17.5	18.3	17.9
Vegetable lard substitute	do		20.1	23.2	22.9		21.6	24.1	23.9		19.2	20.8	21.0
Eggs, strictly fresh	Dozen	28.0	42.7	52.8	47.3	27.1	46.8	52.2	50.6	28.8	45.7	55.3	48.4
Eggs, storage	do	25.0	35.0	40.8	41.3	23.0	36.8	36.8	37.6	25.0		41.9	40.0
Bread	Pound	6.0	9.1	9.1	9.1	5.4	8.4	8.8	8.8	5.0	8.9	8.8	8.8
Flour	do	3.6	5.3	5.3	5.3	3.2	4.5	4.2	4.2	3.8	5.8	5.4	5.5
Corn meal	do	2.4	3.3	3.7	3.7	2.4	3.1	3.4	3.5	2.1	3.0	3.5	3.4
Rolled oats	do		9.1	9.1	9.2		8.4	8.5	8.5		9.6	9.3	9.2
Corn flakes	8-oz. pkg		9.7	9.7	9.8		8.9	8.7	8.7		9.9	10.1	10.1
Wheat cereal	28-oz. pkg		25.9	26.2	26.9		23.6	22.5	22.8		27.0	26.1	26.0
Macaroni	Pound		21.1	20.9	21.0		19.2	18.5	19.1		19.4	18.9	19.1
Rice	do	8.6	8.7	8.9	8.8	9.0	9.0	9.7	9.6	8.2	9.1	9.6	9.6
Beans, navy	do		13.0	12.1	12.3		11.0	9.7	9.4		11.7	11.5	11.3
Potatoes	do	2.0	3.1	3.6	3.7	1.7	2.1	2.9	3.0	1.9	3.2	4.0	4.0
Onions	do		7.0	8.1	8.0		6.0	6.2	6.3		5.9	7.1	7.1
Cabbage	do		6.8	6.2	6.9		6.0	5.9	6.9		5.8	6.4	6.4
Beans, baked	No. 2 can		13.5	12.5	12.6		12.3	12.0	11.7		14.4	13.8	13.6
Corn, canned	do		16.0	16.0	15.7		15.1	15.0	15.1		16.2	16.5	16.2
Peas, canned	do		17.7	18.3	18.5		16.3	16.2	16.5		20.4	20.8	20.8
Tomatoes, canned	do		13.2	13.5	13.5		11.9	11.7	11.5		11.6	12.3	12.3
Sugar, granulated	Pound	6.0	9.1	10.8	10.9	5.0	8.0	9.7	9.9	5.3	8.8	10.6	10.6
Tea	do	60.0	91.3	92.8	92.8	56.0	66.7	67.4	68.9	61.3	82.0	85.2	85.4
Coffee	do	32.0	36.9	37.5	37.6	25.2	33.0	33.5	33.6	28.8	37.5	38.3	38.3
Prunes	do		20.3	19.1	18.9		18.1	16.5	16.2		20.7	19.7	19.6
Raisins	do		20.1	17.1	17.3		16.3	13.9	13.9		20.1	17.8	17.4
Bananas	Dozen		25.3	27.9	26.8		28.1	28.6	28.6		33.6	37.5	36.7
Oranges	do		39.2	32.6	30.9		47.5	39.3	37.1		39.1	36.7	35.8

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

Cities on Specified Dates.

February 15, 1913 and 1923, and for January 15 and February 15, with the exception of February, 1913, as these cities were not sched-

ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES.

As some dealers occasionally fail to report, the number of quotations varies from month to month.]

Boston, Mass.				Bridgeport, Conn.				Buffalo, N. Y.				Butte, Mont.				Charleston, S. C.			
Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.		
1913	1923						1913	1923						1913	1923				
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.		
34.5	59.4	63.4	62.5	43.4	47.4	45.2	20.3	36.3	36.9	37.1	27.9	28.2	27.8	21.0	34.1	33.6	33.2		
32.4	45.8	51.3	50.9	36.5	39.5	38.3	18.3	29.9	31.0	31.2	24.5	24.0	24.0	20.0	30.9	30.9	30.9		
23.4	35.7	38.1	37.8	33.0	35.7	34.8	17.0	27.1	28.1	28.3	22.3	22.3	22.4	19.3	27.3	27.3	27.3		
17.0	23.0	24.9	24.0	23.3	26.3	24.6	14.7	20.0	21.2	20.7	16.0	15.9	16.2	15.0	20.7	20.5	20.0		
	14.8	15.9	15.3	10.5	10.7	10.5	10.7	12.1	12.3	12.0	11.1	11.0	10.8	11.4	14.3	13.4	13.6		
20.6	31.7	30.0	29.0	29.7	29.1	28.6	19.3	30.1	28.9	28.0	27.0	25.6	24.8	23.0	29.1	27.7	28.2		
24.6	37.6	36.8	36.5	45.0	42.9	42.4	20.3	33.2	30.8	30.1	45.9	47.7	45.5	23.0	37.4	34.8	35.3		
28.3	50.6	49.6	49.2	53.8	49.5	49.1	24.0	45.6	44.9	44.9	50.0	51.4	50.5	26.7	41.9	42.3	42.5		
21.8	37.8	37.4	37.2	38.1	35.6	35.0	17.5	32.0	30.0	30.0	29.5	31.9	31.6	21.3	40.6	39.5	41.3		
22.8	39.6	38.6	39.3	39.0	38.0	38.7	20.0	36.1	35.4	35.7	30.5	30.0	30.3	21.4	36.0	34.4	34.8		
	29.2	29.8	29.4	30.1	29.4	29.4		27.6	27.9	27.8	36.8	38.5	38.0		27.1	26.8	26.8		
8.9	14.5	14.9	13.9	15.0	15.0	15.0	8.0	13.0	12.8	12.5	14.2	14.3	14.3	11.7	18.0	18.0	18.0		
	12.6	12.8	12.7	12.5	12.4	12.5		11.9	11.8	11.7	12.3	12.3	12.3		12.0	12.0	12.0		
38.9	59.8	60.8	61.7	67.9	61.1	60.7	41.2	58.4	62.1	61.4	55.7	56.2	55.5	39.8	56.1	58.6	59.2		
	31.0	31.1	31.6	27.0	30.2	30.2		28.0	29.7	30.2	30.5				28.2	30.1	30.1		
	26.0	27.6	27.9	27.8	28.0	28.3		26.1	28.1	28.1	31.2	33.7	33.7		28.0	31.0	31.0		
22.9	38.4	38.8	40.5	37.8	39.5	39.7	21.5	36.4	37.4	37.2	37.9	39.6	40.0	21.0	36.6	34.9	35.0		
15.3	18.2	19.6	18.7	17.3	18.4	18.0	13.9	16.6	17.9	17.3	20.9	21.7	21.2	14.8	18.8	20.3	19.8		
	24.1	24.3	23.1	22.3	24.8	25.2		21.1	23.5	23.8	26.7	27.1	27.1		20.7	23.5	23.5		
37.5	60.0	60.8	67.7	58.7	67.6	64.3	31.0	50.5	57.8	57.9	60.9	66.9	52.2	32.5	43.4	52.6	47.5		
25.2	42.7	42.2	41.7	42.4	42.6	42.5	22.2	36.1	35.8	38.1	33.1	37.8	35.0	23.8	37.0	36.6	41.9		
5.9	8.4	8.4	8.4	8.4	8.4	8.4	5.6	8.3	8.4	8.4	9.7	9.7	9.6	6.2	9.5	10.8	10.8		
3.7	5.4	5.0	5.0	4.9	4.5	4.6	2.9	4.3	4.0	4.3	5.3	5.0	5.0	3.7	6.0	5.7	5.7		
3.5	4.5	5.1	5.1	6.4	7.1	7.0	2.5	3.7	4.2	4.4	3.8	4.1	4.1	2.3	3.0	3.4	3.5		
	8.6	8.8	9.0	8.3	8.4	8.3		7.8	7.9	7.9	6.7	6.8	6.8		9.5	9.3	9.3		
	9.8	9.6	9.6	9.6	9.5	9.4		9.2	9.1	9.2	11.9	12.1	12.1		10.0	9.9	9.9		
	25.2	23.7	23.8	24.4	23.5	23.5		25.2	23.8	23.9	28.8	28.3	28.3		25.0	24.7	24.4		
	23.6	23.0	23.0	23.8	23.2	23.2		21.8	21.7	21.2	21.3	20.6	20.6		20.5	19.6	19.6		
9.2	10.6	11.3	10.9	10.4	10.1	10.1	9.3	9.1	9.2	9.5	9.6	10.3	10.3	5.5	6.3	6.9	7.0		
	10.5	10.3	10.3	11.4	11.1	10.9		11.2	10.3	10.0	10.3	10.8	10.8		12.0	11.4	11.1		
1.7	2.4	2.7	2.8	2.3	2.9	2.9	1.4	1.7	2.2	2.3	1.2	1.8	1.8	2.0	2.6	3.1	3.2		
	6.5	6.4	6.4	5.7	6.8	7.0		5.2	6.9	7.0	4.1	5.0	5.1		5.5	6.5	6.5		
	6.8	5.2	5.7	4.6	5.3	5.8		3.6	3.7	4.0	3.8	3.8	5.3		3.8	4.4	4.5		
	14.2	14.3	14.2	12.2	12.8	12.5		11.1	10.9	10.8	17.7	16.7	16.7		11.5	10.9	10.9		
	19.0	18.6	18.6	18.9	19.1	19.1		14.6	15.1	15.7	15.7	15.0	15.2		14.6	14.3	14.3		
	21.4	21.2	21.1	21.3	21.5	21.7		16.2	16.7	16.9	16.5	16.1	16.2		18.0	18.2	17.9		
	12.8	12.1	12.1	12.9	13.5	13.6		13.2	13.8	14.1	15.1	14.4	13.6		10.8	10.7	10.6		
5.4	8.7	10.3	10.4	8.1	10.7	9.9	5.3	8.6	9.8	10.3	10.3	12.3	12.3	5.0	7.9	9.8	10.0		
58.6	69.0	70.4	69.9	57.0	57.8	57.1	45.0	61.2	62.3	62.6	80.0	82.5	83.3	50.0	70.7	71.6	71.6		
33.0	42.8	43.2	45.5	35.3	37.4	37.4	29.3	35.3	35.1	34.4	45.0	46.9	47.2	26.0	32.7	32.6	32.8		
20.6	17.8	17.7	19.7	18.8	18.4	18.4		19.0	18.2	17.7	20.4	18.8	18.9		19.8	17.7	17.6		
18.0	15.1	14.9	18.1	15.4	15.1	15.1		17.5	14.3	14.4	21.2	19.3	19.1		18.6	15.4	15.2		
53.3	48.6	49.5	36.7	38.0	38.0	38.0		46.5	48.6	49.3	15.5	16.9	16.6		36.9	40.7	38.8		
53.3	42.0	43.2	48.7	39.5	39.5	39.5		51.2	46.8	45.1	40.8	43.3	41.7		33.3	29.8	30.2		

¹Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Chicago, Ill.				Cincinnati, Ohio.				Cleveland, Ohio.			
		Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.
		1913	1923			1913	1923			1913	1923		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	20.9	37.6	40.6	40.3	21.3	33.2	33.8	33.8	22.3	33.7	35.9	35.5
Round steak	do	18.6	28.9	31.1	31.1	19.1	29.9	29.9	30.3	18.8	28.0	29.3	29.3
Rib roast	do	18.1	29.2	31.2	31.3	18.6	27.5	27.6	27.8	18.0	25.3	25.8	25.3
Chuck roast	do	13.9	18.8	20.2	20.8	13.9	17.7	17.8	17.9	14.7	19.3	20.9	20.9
Plate beef	do	11.0	12.0	12.3	12.3	11.6	14.3	14.2	14.4	10.6	11.0	11.8	11.8
Pork chops	do	16.3	24.8	24.3	24.6	19.2	27.0	24.5	24.6	18.3	28.2	28.4	28.2
Bacon, sliced	do	29.0	44.3	41.2	41.5	24.0	33.5	30.0	29.2	24.3	39.9	38.9	37.7
Ham, sliced	do	29.5	46.6	46.6	46.8	26.0	45.4	45.7	45.1	32.0	46.0	49.4	48.5
Lamb, leg of	do	19.1	34.2	34.8	35.6	16.6	34.2	33.2	33.1	18.7	33.6	34.1	34.0
Hens	do	19.4	34.0	31.1	33.6	22.6	36.7	35.8	36.7	20.6	37.1	35.7	36.5
Salmon, canned, red	do		32.2	32.5	32.7		27.9	28.0	27.8		29.4	29.3	29.3
Milk, fresh	Quart	8.0	13.0	14.0	14.0	8.0	12.0	14.0	14.0	8.8	14.0	14.0	14.0
Milk, evaporated	15-16 oz. can		11.4	11.5	11.5		11.6	11.5	11.5		11.7	11.5	11.3
Butter	Pound	39.9	56.4	61.4	58.4	42.3	56.8	63.4	60.5	43.6	60.2	64.8	61.5
Oleomargarine	do		25.6	27.0	27.2		29.7	32.1	32.0		29.4	31.6	31.6
Nut margarine	do		24.5	25.6	25.8		27.6	28.4	28.5		27.5	30.4	30.5
Cheese	do	25.0	40.4	39.9	40.1	21.6	38.4	36.9	36.7	23.0	36.3	37.2	37.3
Lard	do	14.7	16.4	18.8	18.2	13.7	15.4	17.1	16.1	15.8	17.8	20.0	19.2
Vegetable lard substitute	do		23.0	25.3	25.0		23.3	24.3	24.9		23.7	24.9	25.3
Eggs, strictly fresh	Dozen	27.3	45.8	55.2	49.2	27.6	39.2	51.2	44.1	31.8	47.6	53.7	52.8
Eggs, storage	do	22.6	35.2	37.9	37.1	19.0	29.0	35.2	33.4		37.8	40.8	39.6
Bread	Pound	6.1	9.7	9.7	9.7	4.8	8.5	8.4	8.4	5.5	7.9	7.9	7.9
Flour	do	2.8	4.2	4.0	4.1	3.4	4.5	4.4	4.4	3.2	4.7	4.5	4.5
Corn meal	do	2.9	5.4	5.2	5.1	2.5	3.0	3.7	3.6	2.8	3.8	4.2	4.2
Rollod oats	do		8.2	8.8	8.5		8.7	8.4	8.2		8.5	8.8	8.9
Corn flakes	8-oz. pkg		9.6	9.3	9.3		9.4	9.2	9.0		9.9	10.0	10.0
Wheat cereal	28-oz. pkg		24.2	23.5	23.4		23.3	22.9	23.0		24.4	24.6	24.7
Macaroni	Pound		18.0	18.4	18.4		15.9	16.4	16.4		18.9	19.6	19.1
Rice	do	9.0	10.1	10.3	10.3	8.8	8.9	9.8	10.0	8.5	9.0	9.9	9.8
Beans, navy	do		11.4	10.2	10.1		10.8	8.3	8.1		11.2	9.4	9.4
Potatoes	do	1.2	1.9	2.6	2.7	1.4	1.9	2.7	2.6	1.4	2.2	2.3	2.5
Onions	do		5.0	5.8	6.0		5.1	5.2	5.2		4.8	5.9	5.9
Cabbage	do		5.6	4.7	6.3		4.4	4.5	4.8		4.3	4.8	5.3
Beans, baked	No. 2 can		13.0	12.8	12.6		11.6	11.7	12.0		12.7	12.7	13.0
Corn, canned	do		14.4	15.4	15.4		14.1	14.3	14.4		15.9	16.1	16.3
Peas, canned	do		15.8	17.4	17.4		16.4	17.4	17.6		17.3	17.4	17.8
Tomatoes, canned	do		13.6	14.1	14.2		12.4	12.7	12.7		13.7	13.8	13.8
Sugar, granulated	Pound	5.0	8.2	9.6	9.9	5.2	8.5	10.0	10.1	5.5	8.5	10.3	10.4
Tea	do	53.3	70.0	73.5	73.4	60.0	69.6	73.3	74.5	50.0	69.1	67.9	67.1
Coffee	do	30.0	37.6	37.8	38.6	25.6	32.2	33.5	34.6	26.5	40.2	41.4	41.9
Prunes	do		20.1	18.3	18.9		19.9	18.6	18.6		19.3	17.6	17.7
Raisins	do		19.2	16.9	16.6		18.3	16.0	15.7		18.8	15.6	15.5
Bananas	Dozen		37.8	40.9	42.8		38.1	45.8	42.5		48.9	49.4	52.9
Oranges	do		51.8	41.2	40.1		41.3	33.7	33.8		49.7	41.8	45.4

¹ The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

Columbus, Ohio.			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.
			1913	1923			1913	1923			1913	1923			1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
33.7	38.0	37.3	19.6	33.7	34.2	33.6	22.5	29.0	29.4	29.2	22.8	35.7	38.0	37.5	31.0	55.8	57.9	56.8
29.2	32.6	31.7	18.3	30.8	30.2	29.8	18.4	23.5	25.0	25.0	18.2	27.5	29.7	29.7	24.0	41.8	42.5	42.4
25.6	28.0	28.5	17.6	26.5	26.3	15.9	21.1	22.1	21.5	18.2	26.0	27.8	27.1	22.6	27.2	29.1	27.4	27.4
19.4	21.8	22.2	15.4	20.5	21.0	21.3	14.5	16.2	16.8	16.8	14.5	18.7	19.9	19.8	17.0	20.1	21.3	20.9
12.8	14.7	14.7	11.8	14.5	15.6	15.8	9.1	9.7	10.1	9.7	10.3	11.7	12.3	12.2	-----	11.5	13.1	13.1
26.3	25.3	25.1	20.4	27.5	28.5	27.7	16.5	26.6	25.3	24.1	16.8	28.0	27.7	27.1	17.7	27.5	25.6	24.8
38.3	38.5	37.5	36.0	39.7	38.5	39.2	26.3	42.5	41.0	40.8	22.4	39.8	37.5	36.0	24.8	38.1	34.4	34.3
45.3	45.8	45.3	28.8	50.0	49.6	49.6	27.0	48.8	48.0	46.3	24.0	48.6	48.4	47.3	28.7	46.8	45.7	45.4
34.7	40.6	39.6	20.5	44.2	38.3	38.3	15.5	34.7	34.4	34.2	16.7	36.9	35.6	35.3	19.0	38.1	38.8	38.8
33.0	33.3	33.6	18.7	30.8	28.8	29.8	20.0	29.3	28.7	28.9	20.0	36.3	34.2	35.3	24.8	42.2	39.2	40.8
31.6	32.2	31.6	-----	31.6	30.5	30.1	-----	33.2	32.4	32.8	-----	30.4	30.1	29.3	-----	31.1	31.3	31.4
12.0	13.0	13.0	10.0	15.0	15.0	-----	8.4	11.8	11.7	11.7	8.8	14.0	14.0	14.0	9.0	14.0	15.0	14.0
12.1	11.8	11.8	-----	13.5	14.0	14.0	-----	11.7	12.1	12.1	-----	11.6	11.6	11.7	-----	13.6	13.5	13.4
57.1	63.0	59.5	39.0	56.5	61.5	60.9	40.0	53.1	59.0	56.4	40.4	58.3	61.8	60.3	38.4	56.8	58.7	59.6
27.6	30.2	30.2	-----	27.5	34.0	34.0	-----	28.0	31.4	32.6	-----	28.6	30.3	30.6	-----	30.0	31.5	31.5
26.1	28.4	28.5	-----	29.4	32.7	32.1	-----	28.3	29.8	29.8	-----	27.2	27.6	27.9	-----	27.7	30.7	30.7
36.9	37.1	37.1	20.0	36.9	36.9	37.5	26.1	38.9	39.6	38.4	21.3	37.0	37.1	37.0	23.6	37.6	38.9	38.7
15.2	16.7	15.9	16.0	20.6	22.8	22.4	16.3	19.3	19.3	18.6	15.9	17.1	19.0	18.1	14.8	16.7	18.5	17.7
22.4	24.5	25.4	-----	20.6	21.9	21.6	-----	21.9	25.2	24.8	-----	23.4	24.9	24.9	-----	23.0	25.4	25.4
41.5	52.2	48.9	26.3	41.2	51.9	36.4	29.0	42.3	56.3	41.5	31.2	48.5	59.6	55.4	37.7	68.3	74.3	63.8
35.0	35.0	-----	-----	-----	-----	-----	-----	32.5	36.1	38.3	24.8	37.0	38.3	40.3	25.0	43.1	41.0	41.5
7.7	7.7	7.7	5.6	8.9	8.7	8.7	5.3	8.2	7.7	7.7	5.6	8.6	8.8	8.8	6.2	9.1	8.9	8.8
4.6	4.1	4.2	3.3	4.7	4.5	4.5	2.7	3.9	3.6	3.6	3.2	4.4	4.1	4.2	3.3	5.0	4.9	4.9
3.0	3.7	3.7	2.6	3.5	4.6	4.6	2.5	3.2	3.3	3.3	2.7	4.3	4.8	4.8	3.4	5.8	7.3	7.2
9.0	9.4	9.5	-----	10.4	10.5	10.8	-----	8.8	8.9	9.0	-----	8.9	8.9	8.9	-----	9.7	9.6	9.7
10.1	9.7	9.7	-----	10.8	9.8	9.8	-----	9.9	10.0	10.0	-----	9.1	9.0	9.1	-----	9.9	10.0	10.0
21.4	24.6	24.6	-----	25.9	25.3	25.3	-----	21.7	21.8	21.5	-----	21.0	21.1	21.1	-----	27.7	26.1	25.5
18.6	18.8	18.8	-----	21.2	21.0	20.9	-----	20.8	20.0	20.2	-----	19.1	19.1	19.1	-----	24.0	23.6	23.5
10.0	10.7	10.3	9.3	9.9	11.2	11.2	8.6	9.4	9.7	9.9	8.4	9.6	9.6	9.6	10.0	10.3	10.5	10.2
11.0	8.9	8.5	-----	11.6	11.8	11.6	-----	11.9	11.4	11.3	-----	10.9	8.3	8.1	-----	10.8	10.4	10.3
1.9	2.5	2.6	2.0	3.3	4.1	4.0	1.1	1.5	2.4	2.4	1.3	1.3	1.9	1.9	1.8	2.3	2.8	2.9
5.9	7.3	6.8	-----	7.2	7.6	7.5	-----	3.8	5.1	4.7	-----	4.9	5.3	5.2	-----	5.8	6.7	6.5
5.1	4.7	5.5	-----	5.4	5.9	5.9	-----	3.3	3.2	3.3	-----	4.6	5.1	5.6	-----	6.6	5.4	7.0
13.2	13.7	13.7	-----	14.8	14.9	14.8	-----	14.4	14.2	13.9	-----	12.3	11.9	12.0	-----	13.4	12.8	12.9
12.5	12.8	12.9	-----	17.0	17.2	17.2	-----	14.4	15.0	15.0	-----	15.2	15.6	15.6	-----	16.3	16.4	16.6
14.5	16.0	15.9	-----	21.1	22.1	21.8	-----	16.2	16.8	16.9	-----	17.0	17.5	17.5	-----	18.2	18.0	18.0
13.1	13.6	13.5	-----	13.9	14.3	14.2	-----	13.1	13.9	13.8	-----	13.0	12.7	12.9	-----	13.1	13.5	13.8
8.8	10.3	10.3	5.9	9.5	11.2	11.4	5.4	9.3	10.7	10.9	5.1	8.6	9.8	10.1	5.3	8.8	10.5	10.4
76.7	78.6	79.4	66.7	92.7	97.6	97.6	52.8	68.3	67.3	69.0	43.3	66.5	64.3	64.3	44.2	59.6	59.0	61.2
36.6	38.9	39.0	36.7	42.7	43.8	44.5	29.4	35.9	38.3	38.1	29.3	38.4	37.6	38.3	33.0	39.2	40.4	49.5
20.8	20.3	19.7	-----	23.3	19.0	19.1	-----	21.1	19.1	18.8	-----	19.8	17.7	17.8	-----	18.4	16.5	16.7
18.5	16.2	16.4	-----	19.8	17.1	17.5	-----	19.7	16.1	15.4	-----	17.5	15.8	15.7	-----	19.3	16.7	16.3
41.8	41.5	40.0	-----	34.2	35.0	33.6	-----	13.8	14.9	14.6	-----	34.4	36.4	36.0	-----	10.7	11.7	11.7
45.6	39.1	38.2	-----	51.2	50.5	51.2	-----	51.0	39.8	35.5	-----	50.3	42.3	46.0	-----	59.9	35.3	40.1

*Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Houston, Tex.			Indianapolis, Ind.			Jacksonville, Fla.		
		Feb.	Jan.	Feb.	Feb. 15—		Jan.	Feb.	Feb. 15—	
		15, 1923.	15, 1924.	15, 1924.	1913	1923	15, 1924.	15, 1924.	1913	1923
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	30.0	29.3	28.6	23.5	34.4	34.9	35.5	25.8	33.6
Round steak.....	do.....	29.2	27.9	27.9	20.8	32.8	33.9	34.2	20.3	27.3
Rib roast.....	do.....	24.2	23.5	22.4	16.5	24.7	25.5	26.2	22.5	25.7
Chuck roast.....	do.....	19.9	19.6	18.5	14.6	20.9	21.7	21.8	14.3	17.5
Plate beef.....	do.....	15.9	15.5	15.2	11.2	14.0	14.0	13.7	10.3	11.5
Pork chops.....	do.....	27.4	26.1	25.9	18.0	27.6	24.5	24.5	23.0	28.6
Bacon, sliced.....	do.....	45.9	43.5	42.5	28.0	37.1	33.3	32.9	25.6	36.1
Ham, sliced.....	do.....	46.2	45.4	44.3	29.5	48.8	46.6	46.4	26.3	44.1
Lamb, leg of.....	do.....	35.0	33.3	32.5	17.7	40.0	37.5	37.9	19.5	35.8
Hens.....	do.....	34.5	30.2	33.1	21.0	32.4	31.6	32.9	22.0	33.9
Salmon, canned, red.....	do.....	31.0	29.9	29.5	37.0	35.4	35.0	35.0	30.5	30.8
Milk, fresh.....	Quart.....	15.8	15.8	15.8	8.0	12.0	12.0	12.0	12.5	17.7
Milk, evaporated.....	15-16 oz. can.....	12.9	12.9	13.0	11.6	11.6	11.6	11.6	12.6	13.0
Butter.....	Pound.....	53.9	60.0	58.6	41.8	55.5	61.9	57.9	43.8	58.9
Oleomargarine.....	do.....	32.5	31.7	33.3	28.9	30.6	30.7	30.7	29.1	30.3
Nut margarine.....	do.....	29.0	31.0	30.6	26.5	29.3	29.6	29.6	28.7	28.7
Cheese.....	do.....	36.8	35.1	34.5	21.0	38.5	36.8	36.3	22.5	36.3
Lard.....	do.....	18.9	20.4	19.9	15.0	14.7	16.3	14.7	15.3	17.8
Vegetable lard substitute.....	do.....	18.6	18.2	18.2	23.4	25.4	25.3	25.3	21.0	23.1
Eggs, strictly fresh.....	Dozen.....	36.5	54.3	35.0	29.0	40.3	51.5	46.6	32.5	41.2
Eggs, storage.....	do.....	33.3	41.1	30.0	24.0	34.0	40.7	39.0	39.0	38.7
Bread.....	Pound.....	7.2	7.0	7.0	5.1	8.4	8.5	8.5	6.5	10.2
Flour.....	do.....	5.1	4.7	4.7	3.2	4.7	4.4	4.4	3.7	5.7
Corn meal.....	do.....	3.6	4.3	4.2	2.6	3.1	3.6	3.5	2.8	3.2
Rolled oats.....	do.....	8.9	9.0	8.9	7.8	7.3	7.3	7.3	9.8	9.3
Corn flakes.....	8-oz. pkg.....	9.7	9.7	9.7	9.2	9.0	8.9	8.9	9.9	9.7
Wheat cereal.....	28-oz. pkg.....	24.3	24.1	24.1	24.9	24.4	24.4	24.4	23.8	24.6
Macaroni.....	Pound.....	20.2	20.0	19.2	18.5	18.9	18.5	18.5	19.6	19.8
Rice.....	do.....	7.8	8.0	8.2	9.2	10.1	10.6	10.7	6.6	9.0
Beans, navy.....	do.....	10.3	10.4	10.3	11.4	8.9	9.1	9.1	11.3	11.0
Potatoes.....	do.....	3.5	4.2	3.9	1.3	1.4	2.4	2.3	2.2	2.9
Onions.....	do.....	5.8	6.4	6.1	4.9	5.9	5.8	5.8	6.5	7.2
Cabbage.....	do.....	4.1	5.5	5.4	4.2	4.6	4.7	4.7	4.9	5.6
Beans, baked.....	No. 2 can.....	13.6	13.3	13.0	13.5	13.1	13.2	13.2	11.7	12.1
Corn, canned.....	do.....	13.9	15.3	15.2	13.4	13.6	13.9	13.9	16.1	16.3
Peas, canned.....	do.....	19.0	18.0	18.1	15.2	16.1	16.2	16.2	16.0	17.2
Tomatoes, canned.....	do.....	11.9	12.2	12.0	13.4	14.2	14.2	14.2	11.6	11.3
Sugar, granulated.....	Pound.....	8.9	10.0	10.0	5.9	9.1	10.2	10.6	6.1	8.4
Tea.....	do.....	69.8	74.5	74.5	60.0	77.2	79.2	79.6	60.0	84.4
Coffee.....	do.....	34.4	34.5	34.9	31.3	38.4	39.4	39.5	34.5	40.1
Prunes.....	do.....	20.1	18.4	18.0	21.1	19.5	20.1	20.1	21.1	18.3
Raisins.....	do.....	19.1	16.2	16.0	19.6	17.4	17.4	17.4	20.3	17.3
Bananas.....	Dozen.....	28.6	31.5	28.5	30.3	32.9	31.4	31.4	26.3	35.0
Oranges.....	do.....	45.2	38.8	38.8	44.9	37.6	36.7	36.7	30.9	27.0

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

ARTI

Fla.

Feb.
15,
1924.

Cts.
21.9
20.0
16.7
13.8
10.5

28.4
28.4
27.5
16.3
16.1

30.8
20.0
13.0
61.4
31.0

28.6
35.7
18.8
24.0
52.7

38.7
10.1
5.4
3.8
9.6

9.7
24.8
19.9
8.9
11.3

3.7
7.8
5.5
12.0
16.3

18.0
11.3
10.8
59.0
40.0

18.6
17.5
11.7
24.4

ities

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Feb. 15—		Jan. 15, 1924.		Feb. 15—		Jan. 15, 1924.		Feb. 15—		Jan. 15, 1924.		Feb. 15—		Jan. 15, 1924.		Feb. 15—		Jan. 15, 1924.	
1913	1923			1913	1923			1913	1923			1913	1923			1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
21.9	34.7	38.0	37.5	23.8	32.0	33.2	33.6	22.8	32.4	34.2	34.6	20.1	30.0	31.5	31.5	34.0	51.8	55.8	54.4
20.0	28.8	31.5	30.7	19.4	29.4	29.2	29.0	20.4	26.9	28.3	28.7	18.0	27.0	27.5	27.5	27.6	42.1	44.6	44.4
16.7	23.7	25.2	25.6	18.4	26.4	25.9	26.3	18.6	28.2	27.8	28.1	17.1	23.7	23.4	23.7	18.4	25.9	27.9	27.6
13.8	17.2	18.9	18.4	15.0	18.8	18.6	18.8	16.0	18.0	19.0	19.3	13.3	17.4	17.5	17.5	15.8	20.7	22.0	21.3
10.5	10.5	11.5	11.5	12.0	14.0	15.0	14.8	12.4	13.2	14.0	14.1	11.4	13.4	13.3	13.5	-----	14.6	15.4	15.5
17.3	24.9	23.9	22.7	19.0	29.4	28.4	27.6	24.4	35.8	35.3	35.0	17.4	22.3	23.1	22.3	18.2	27.5	27.2	26.0
28.4	41.2	39.5	39.5	34.0	40.9	38.8	38.5	33.8	48.7	48.3	47.1	26.6	34.3	31.2	29.6	22.2	34.1	31.3	31.4
27.5	45.0	45.4	44.8	28.8	46.9	45.0	45.3	35.0	58.7	57.7	58.2	26.1	41.3	40.8	40.3	27.2	40.2	38.7	37.7
16.3	31.5	34.0	34.0	18.8	36.1	36.3	35.0	19.2	33.0	33.8	34.2	17.6	34.3	36.0	35.8	17.8	36.4	35.7	35.3
16.1	31.4	29.6	30.5	17.6	30.9	28.9	27.9	28.3	40.5	40.5	40.8	21.5	33.8	35.5	35.6	23.0	42.0	40.7	41.3
32.0	33.4	34.1	-----	31.4	30.4	30.8	-----	37.8	38.2	38.0	-----	28.8	29.4	29.4	-----	29.8	29.8	29.8	-----
8.7	13.3	13.3	13.3	10.0	15.7	15.7	15.7	10.0	15.0	15.0	15.0	8.8	12.0	13.0	13.0	8.0	13.0	14.0	13.0
12.6	12.1	12.1	-----	13.1	13.0	13.0	-----	10.8	10.8	10.5	-----	12.0	12.3	12.3	-----	13.6	13.8	13.7	-----
41.5	58.4	61.6	60.5	45.0	55.7	60.3	60.4	43.5	57.1	60.6	58.7	43.2	55.7	64.1	61.7	41.8	61.1	62.6	62.9
26.9	27.2	27.4	-----	30.6	31.4	31.4	-----	31.9	33.1	33.3	-----	28.4	31.6	31.6	-----	28.5	28.3	28.8	-----
27.3	28.0	28.1	-----	28.8	29.1	29.6	-----	29.0	30.1	30.1	-----	26.8	28.1	28.0	-----	22.0	22.7	23.3	-----
21.5	38.1	37.8	37.2	21.7	39.2	38.1	37.6	19.5	38.5	40.8	40.8	20.8	37.4	35.0	34.3	21.3	38.0	38.0	38.4
16.1	17.5	18.5	17.6	15.0	19.5	19.9	19.2	17.9	19.3	21.0	20.1	15.2	14.4	16.3	15.6	16.0	17.4	18.5	17.9
21.8	25.5	25.6	-----	20.1	20.8	20.8	-----	22.7	23.9	24.9	-----	23.1	24.8	26.0	-----	20.6	23.3	23.8	-----
25.4	40.0	52.8	44.8	25.0	40.7	48.5	43.0	26.0	38.4	48.3	36.9	25.0	36.0	49.8	41.5	34.6	55.6	62.6	59.6
17.0	35.0	36.6	35.0	-----	40.0	41.3	35.0	-----	36.9	-----	20.1	27.0	34.3	36.0	25.0	41.2	42.1	43.4	-----
5.9	8.2	8.3	8.3	6.0	8.2	8.1	8.1	6.2	8.8	9.0	9.3	5.7	8.4	8.4	5.9	8.4	8.4	8.4	-----
3.0	4.6	4.3	4.3	3.6	5.3	5.1	5.0	3.6	4.8	4.5	4.5	3.6	5.5	4.9	4.9	3.4	5.2	4.8	4.8
2.6	4.4	4.5	4.5	2.4	3.0	3.5	3.5	3.4	4.2	4.5	4.3	2.2	2.9	3.1	3.1	3.6	4.6	4.8	4.7
-----	8.4	8.9	8.8	-----	10.3	9.4	9.4	-----	9.9	9.7	9.5	-----	8.4	8.6	8.5	-----	8.8	8.8	8.8
9.9	9.9	9.9	-----	9.8	9.8	9.8	-----	9.6	9.8	9.8	-----	9.3	9.3	9.3	-----	9.7	9.9	9.8	-----
25.6	25.2	25.2	-----	25.6	24.8	24.7	-----	23.4	23.5	23.3	-----	23.9	23.8	23.8	-----	25.3	24.4	24.4	-----
20.6	21.6	21.3	-----	21.5	20.3	20.5	-----	15.6	15.8	15.3	-----	16.4	16.8	16.7	-----	24.9	23.2	24.2	-----
8.7	9.5	9.2	9.1	8.3	8.2	8.1	8.2	7.7	9.6	9.9	10.2	8.1	8.2	8.9	8.7	8.5	8.9	9.3	9.4
11.6	9.8	9.7	-----	12.3	11.3	11.0	-----	9.6	9.6	9.4	-----	10.5	8.1	7.9	-----	11.1	9.7	9.7	-----
1.4	2.1	2.5	2.5	1.7	2.4	3.2	2.9	1.0	2.2	3.6	3.8	1.5	1.6	2.3	2.2	1.4	2.1	2.5	2.6
5.5	7.1	7.0	-----	5.9	7.9	7.1	-----	5.8	5.8	5.6	-----	5.4	6.2	6.0	-----	5.2	6.2	6.1	-----
5.1	5.8	5.4	-----	5.9	6.3	6.5	-----	3.8	6.4	6.4	-----	5.2	5.6	6.4	-----	4.3	4.2	4.8	-----
14.4	14.0	14.0	-----	13.6	12.8	12.8	-----	13.1	13.0	12.7	-----	11.7	11.5	11.6	-----	14.9	14.3	14.3	-----
13.8	14.0	14.1	-----	15.7	15.6	15.7	-----	16.4	15.7	15.1	-----	13.9	13.9	13.8	-----	17.5	18.1	18.1	-----
15.5	16.4	16.5	-----	18.2	18.7	18.0	-----	18.7	17.7	17.4	-----	15.4	16.4	16.7	-----	20.6	21.5	21.4	-----
13.3	14.1	13.9	-----	12.9	13.2	13.0	-----	15.4	14.7	14.7	-----	11.2	12.0	12.1	-----	20.1	20.9	20.4	-----
5.6	9.4	10.4	10.6	5.5	9.4	10.9	11.2	5.4	9.3	10.0	10.4	5.2	8.6	10.5	10.4	5.4	9.0	10.5	10.6
54.0	80.0	79.4	80.9	50.0	91.8	83.8	86.3	54.5	69.5	68.6	69.1	60.0	71.0	73.3	72.8	45.0	56.4	58.3	58.9
27.8	38.9	39.6	40.7	30.8	41.2	41.6	42.2	36.3	39.0	43.1	43.5	27.5	35.1	36.3	36.5	32.0	39.0	39.4	40.1
20.7	17.6	17.3	-----	21.0	18.2	17.2	-----	19.6	18.3	17.6	-----	20.1	17.9	18.3	-----	19.1	17.1	17.5	-----
20.8	17.1	17.0	-----	20.7	18.6	18.9	-----	17.9	15.9	14.5	-----	18.5	15.0	14.9	-----	18.4	15.2	15.1	-----
13.0	13.1	14.0	-----	10.1	11.3	11.4	-----	11.3	13.3	12.2	-----	38.6	38.3	38.3	-----	10.4	11.8	11.5	-----
48.4	45.3	44.1	-----	50.8	38.5	37.8	-----	34.1	36.8	35.9	-----	40.0	33.3	31.5	-----	51.0	39.8	37.1	-----

¹ No. 2½ can

² No. 3 can.

³ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Feb. 15—		Jan. 15,	Feb. 15,	Feb. 15—		Jan. 15,	Feb. 15,	Feb. 15—		Jan. 15,	Feb. 15,
		1913	1923	1924.	1924.	1913	1923	1924.	1924.	1913	1923	1924.	1924.
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	20.0	30.1	33.2	32.9	20.5	35.5	37.5	37.1	20.0	30.2	29.7	29.4
Round steak	do	16.8	26.3	28.8	28.3	18.5	31.1	32.5	32.2	18.0	24.9	25.9	25.5
Rib roast	do	18.2	22.6	24.0	23.8	17.3	26.4	27.3	27.3	17.7	24.0	23.9	23.5
Chuck roast	do	13.9	17.0	17.9	17.7	15.0	21.3	22.5	22.4	14.5	18.4	18.6	19.1
Plate beef	do	10.2	12.7	14.0	14.2	10.8	12.4	13.2	13.1	8.7	9.4	10.3	10.5
Pork chops	do	18.6	22.5	23.6	22.1	15.3	26.8	25.1	24.4	16.8	26.9	26.1	25.1
Bacon, sliced	do	29.1	37.3	35.4	34.3	26.3	40.6	38.4	38.2	25.0	42.5	38.1	38.1
Ham, sliced	do	26.4	44.6	43.8	44.6	26.8	44.0	43.5	43.4	27.5	45.6	42.5	41.9
Lamb, leg of	do	29.4	35.3	34.1	34.5	19.5	36.1	35.8	35.7	15.0	33.0	33.1	33.3
Hens	do	19.6	30.4	28.0	28.1	18.8	32.7	31.3	32.8	19.0	31.4	29.3	30.6
Salmon, canned, red	do		37.2	35.4	36.2		32.9	34.7	34.4		37.4	36.0	35.9
Milk, fresh	Quart	10.0	15.0	14.7	14.7	7.0	10.0	11.0	11.0	7.0	11.0	12.0	12.0
Milk, evaporated	15-16 oz. can		12.4	12.8	13.0		11.4	11.7	11.6		12.5	12.7	12.7
Butter	Pound	42.1	55.3	58.4	58.6	40.2	56.0	60.9	57.4	39.1	54.2	57.9	58.6
Oleomargarine	do		28.3	28.6	28.6		26.7	28.8	29.0		26.4	28.4	28.2
Nut margarine	do		24.6	25.1	25.0		25.3	27.6	27.7		24.9	26.6	26.6
Cheese	do	20.0	36.8	34.7	33.9	22.7	35.8	36.6	35.6	20.8	36.7	35.7	35.7
Lard	do	15.2	15.7	17.3	16.5	15.1	17.4	19.4	18.6	15.2	17.0	18.4	17.5
Vegetable lard substitute	do		21.7	23.7	24.1		22.5	25.3	25.4		23.2	27.1	27.2
Eggs, strictly fresh	Dozen	29.3	40.2	50.6	45.0	29.0	42.5	52.5	47.7	28.1	43.1	44.2	42.1
Eggs, storage	do	20.0	31.0	37.5		22.0	32.2	35.5	34.8	21.7	29.5	33.7	32.3
Bread	Pound	6.0	9.0	9.0	9.0	5.6	8.9	8.8	9.2	5.7	9.0	9.0	9.0
Flour	do	3.6	5.5	5.1	5.3	3.1	4.3	4.1	4.2	2.9	4.7	4.3	4.3
Corn meal	do	2.1	2.9	3.7	3.5	3.3	3.8	4.5	4.5	2.4	3.8	4.4	4.3
Rollod oats	do		9.2	9.5	9.5		7.0	7.5	7.6		8.7	8.4	8.4
Corn flakes	8-oz. pkg		9.5	9.9	10.1		9.1	9.4	9.4		10.2	10.0	9.9
Wheat cereal	28-oz. pkg		23.8	23.9	24.4		24.0	24.2	24.2		24.9	24.2	24.2
Macaroni	Pound		18.3	18.4	18.7		17.5	17.7	17.8		17.6	17.8	17.7
Rice	do	7.5	7.8	8.4	8.7	9.0	10.0	10.2	10.4	8.6	9.7	9.7	9.7
Beans, navy	do		12.0	10.0	9.8		11.5	9.7	9.5		11.2	9.6	9.6
Potatoes	do	1.6	2.5	3.2	3.2	1.2	1.4	2.1	2.3	1.0	1.5	1.7	1.9
Onions	do		4.8	5.5	5.8		5.3	6.3	6.2		4.6	6.0	6.1
Cabbage	do		4.7	4.6	4.9		3.8	4.6	6.0		3.8	3.7	3.9
Beans, baked	No. 2 can		13.0	12.9	13.0		11.7	11.9	12.0		13.8	14.2	13.9
Corn, canned	do		14.5	14.8	14.9		15.2	15.7	15.7		13.6	13.7	13.9
Peas, canned	do		17.5	17.7	18.1		15.3	16.1	16.3		15.8	16.6	16.4
Tomatoes, canned	do		12.8	12.7	12.8		13.4	14.3	14.0		14.9	14.8	14.7
Sugar, granulated	Pound	5.5	8.8	10.3	10.7	5.4	8.2	9.7	10.0	5.6	9.3	10.3	10.4
Tea	do	63.8	82.3	85.4	84.6	50.0	70.2	70.5	70.2	45.0	65.5	65.3	65.3
Coffee	do	27.5	37.2	38.3	38.9	27.5	34.1	35.0	35.9	30.8	41.3	42.5	42.9
Prunes	do		19.7	18.3	18.5		20.4	18.1	18.9		22.1	18.8	18.5
Raisins	do		18.5	16.5	16.5		18.2	15.5	15.4		19.2	16.4	16.4
Bananas	Dozen		34.4	37.0	35.5		30.4	32.5	32.0		32.5	35.1	34.0
Oranges	do		39.8	38.2	36.2		49.2	43.8	42.8		49.7	45.6	42.2

1 Whole.

2 No. 3 can.

3 Per pound.

CLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

Cts.	Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
	Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.
				1913	1923			1913	1923			1913	1923			1913	1923		
	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
7	29.4			30.8	31.9	30.0	25.2	41.4	45.6	44.2	30.0	48.1	51.7	51.0	19.5	31.0	32.4	32.3	24.7
8	25.5			29.8	30.8	29.2	24.8	38.5	43.1	42.7	26.2	39.3	42.8	42.2	17.5	28.1	29.0	29.0	23.1
9	23.5			26.0	25.4	23.5	19.6	33.4	34.4	34.2	23.0	33.3	35.4	34.8	18.8	26.7	28.8	28.4	21.1
10	19.1			19.8	20.4	19.2	16.8	21.6	24.4	23.6	17.6	24.5	25.9	25.6	13.8	19.8	21.2	20.9	15.1
11	10.5			15.4	15.6	15.5	11.6	12.3	13.5	13.2		14.7	14.2	13.8	10.8	16.3	17.3	17.3	14.0
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			
25																			
26																			
27																			
28																			
29																			
30																			
31																			
32																			
33																			
34																			
35																			
36																			
37																			
38																			
39																			
40																			
41																			
42																			
43																			
44																			
45																			
46																			
47																			
48																			
49																			
50																			
51																			

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Feb.	Jan.	Feb.	Feb. 15—		Jan.	Feb.	Feb.	Jan.	Feb.
		15, 1923.	15, 1924.	15, 1924.	1913	1923	15, 1924.	15, 1924.	15, 1923.	15, 1924.	15, 1924.
Sirloin steak	Pound	Cts. 36.3	Cts. 40.9	Cts. 40.9	Cts. 23.0	Cts. 33.2	Cts. 36.2	Cts. 35.9	Cts. 30.4	Cts. 32.4	Cts. 32.1
Round steak	do.	29.6	34.8	34.4	19.2	29.3	31.6	31.8	29.1	29.9	29.6
Rib roast	do.	29.2	33.2	33.0	16.7	24.6	26.6	25.6	23.1	22.9	23.1
Chuck roast	do.	18.7	22.5	21.5	13.5	18.9	20.5	19.9	18.4	19.9	19.7
Plate beef	do.	13.8	15.0	14.5	9.5	9.8	10.4	10.4	12.5	13.0	12.8
Pork chops	do.	28.1	25.5	25.7	16.5	25.9	25.8	24.6	26.0	25.2	24.1
Bacon, sliced	do.	37.0	32.1	32.5	25.5	45.6	43.1	43.1	41.1	39.7	39.3
Ham, sliced	do.	38.5	36.6	38.6	27.0	48.8	46.9	46.9	45.4	43.9	44.6
Lamb, leg of	do.	37.6	38.1	37.8	16.5	34.8	36.5	36.2	33.9	34.4	33.9
Hens	do.	37.2	35.7	35.3	16.9	30.4	30.8	30.4	28.9	29.6	30.6
Salmon, canned, red	do.	29.7	28.8	28.6		33.5	33.2	33.2	32.7	32.1	32.1
Milk, fresh	Quart	17.0	17.0	17.0	8.2	11.0	12.2	12.2	10.8	12.2	12.4
Milk, evaporated	15-16 oz. can.	11.2	11.7	11.7		11.9	12.0	12.0	11.9	12.0	12.0
Butter	Pound	56.9	60.8	61.7	40.0	52.9	59.1	56.6	54.4	59.4	57.7
Oleomargarine	do.	30.0	31.7	31.7		28.7	30.0	29.7	29.5	31.0	31.4
Nut margarine	do.	27.7	27.0	27.4		27.4	28.6	29.1	27.1	28.8	29.3
Cheese	do.	35.3	33.1	33.2	22.9	36.6	35.6	35.4	37.3	38.0	38.1
Lard	do.	16.4	17.3	16.4	16.4	18.9	19.6	19.0	17.1	19.1	18.5
Vegetable lard substitute	do.	17.7	18.4	18.0		23.0	26.0	25.8	23.7	25.8	25.6
Eggs, strictly fresh	Dozen	42.6	47.3	47.5	25.0	38.2	46.7	41.5	38.7	51.1	48.5
Eggs, storage	do.	35.7	38.3	37.5			35.2	32.5	28.0	35.3	35.0
Bread	Pound	7.9	7.8	7.8	5.2	9.8	9.9	9.9	8.0	8.6	8.6
Flour	do.	4.8	4.4	4.5	2.9	4.2	3.8	3.8	4.7	4.5	4.5
Corn meal	do.	3.4	4.0	4.0	2.4	3.6	4.0	4.1	3.7	4.2	4.0
Rollod oats	do.	8.1	8.1	8.0		9.6	10.2	10.5	9.1	9.1	9.0
Corn flakes	8-oz. pkg	9.6	9.2	9.2		10.2	9.7	10.0	10.0	9.8	9.9
Wheat cereal	28-oz. pkg	24.3	23.3	23.3		24.3	24.4	24.9	26.4	25.8	25.2
Macaroni	Pound	19.8	20.4	20.4		19.9	20.1	20.1	19.4	19.5	19.5
Rice	do.	9.7	9.9	10.0	8.5	9.4	9.0	9.1	9.5	9.8	9.5
Beans, navy	do.	10.7	10.0	9.7		11.8	10.7	10.7	12.3	9.7	9.4
Potatoes	do.	2.3	2.7	3.1	1.3	1.6	2.4	2.3	1.7	2.2	2.3
Onions	do.	5.5	7.0	6.6		4.4	6.1	6.1	5.6	7.1	7.5
Cabbage	do.	4.2	4.4	5.6		4.2	5.5	5.2	4.5	4.3	4.8
Beans, baked	No. 2 can	10.3	9.7	9.7		15.4	14.8	14.8	13.3	12.9	12.8
Corn, canned	do.	14.9	15.9	15.5		16.6	16.9	17.0	14.1	14.3	14.2
Peas, canned	do.	18.3	18.5	18.8		17.1	16.4	16.5	17.1	17.8	17.6
Tomatoes, canned	do.	12.3	11.0	11.0		13.9	14.2	14.5	14.3	14.1	14.0
Sugar, granulated	Pound	7.9	9.7	9.7	5.7	8.7	10.1	10.3	9.2	10.7	10.8
Tea	do.	76.4	80.6	79.9	56.0	74.2	76.9	76.9	61.1	62.6	62.5
Coffee	do.	37.8	37.7	37.3	30.0	40.9	41.1	41.3	36.7	36.9	37.2
Prunes	do.	19.4	16.3	16.2		20.3	19.2	18.8	22.1	20.5	20.6
Raisins	do.	18.0	15.8	15.5		20.8	18.4	18.3	20.1	16.9	16.8
Bananas	Dozen	34.2	37.5	38.3		12.6	13.7	13.6	11.1	13.9	13.2
Oranges	do.	41.2	38.3	34.8		51.5	40.6	39.3	48.2	42.8	42.4

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.				Portland, Oreg.				Providence, R. I.			
Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.
1913	1923			1913	1924			1923.	1924.	1924.	1913	1923	1924.	1913	1923	1924.	1923	1924.	1924.
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
28.3	147.2	149.3	149.5	24.8	41.2	42.8	42.4	55.3	57.4	56.9	22.4	27.8	28.8	28.6	38.2	64.6	169.4	168.8	
23.4	36.8	39.2	38.2	21.4	34.6	35.5	34.6	43.4	44.1	44.0	19.5	24.5	25.1	25.6	28.2	45.6	48.1	47.5	
21.4	31.9	33.3	33.7	20.6	30.8	32.3	31.9	28.3	29.8	29.4	18.7	23.4	24.8	24.2	23.0	35.4	38.3	36.5	
16.5	19.8	21.2	21.0	15.6	20.8	22.1	22.0	18.5	20.2	19.2	15.8	16.4	16.9	17.1	17.4	25.3	27.3	26.9	
11.3	9.8	10.8	10.8	11.0	11.1	11.8	11.5	13.8	14.6	15.6	12.4	12.2	12.5	12.5	15.9	18.5	18.6		
19.1	30.3	30.1	29.3	20.0	29.9	30.3	28.4	28.9	26.6	26.6	19.2	30.6	27.6	27.6	18.4	30.8	30.2	29.8	
23.4	37.6	35.1	34.7	27.2	41.4	41.0	40.3	38.2	35.6	34.9	27.5	44.1	42.9	41.4	21.8	37.2	36.2	35.4	
29.0	51.1	49.3	48.7	29.0	52.3	52.9	52.8	47.0	46.9	46.8	28.8	46.8	46.9	46.6	28.5	52.3	52.9	50.9	
18.6	38.2	38.0	38.0	21.5	38.1	38.3	38.1	36.2	35.6	34.3	17.0	34.4	33.7	33.5	20.0	39.4	39.7	38.6	
21.3	38.9	37.1	38.1	25.3	42.5	41.1	41.7	40.6	38.6	39.1	22.0	31.5	33.6	33.5	22.8	40.8	40.8	40.5	
27.1	26.2	26.2	26.2	28.2	28.2	28.0	28.6	27.7	27.7	27.7	36.8	35.7	36.7	36.7	31.3	30.5	30.3		
8.0	12.0	12.0	12.0	8.8	14.0	15.0	14.0	14.0	14.0	14.0	9.7	12.6	12.8	11.8	9.0	15.0	15.0	14.0	
12.3	12.0	12.2	12.2	11.8	11.8	11.9	13.4	13.4	13.6	13.6	12.0	12.0	11.4	11.4	12.4	12.5	12.4		
47.1	62.8	66.5	64.7	43.1	59.7	64.5	62.6	61.3	63.2	64.1	43.5	53.8	55.9	55.1	41.0	58.5	59.7	60.4	
29.0	30.9	31.4	31.4	28.0	30.8	30.8	30.1	31.5	31.7	31.7	27.8	29.9	29.8	29.8	29.9	29.1	29.4		
27.8	28.3	29.6	29.6	26.0	28.3	27.8	27.4	28.0	28.2	28.2	28.0	29.8	29.7	29.7	27.7	28.8	29.1		
25.0	39.3	38.0	38.0	24.5	38.3	39.3	39.1	38.8	39.4	39.5	21.3	39.3	37.5	37.1	22.7	36.5	36.6	36.5	
14.4	16.1	17.6	16.6	15.1	15.4	18.0	17.3	17.9	18.7	18.0	17.9	20.0	20.0	19.6	15.0	17.0	18.4	17.5	
22.8	24.6	24.6	24.6	22.2	24.4	24.8	22.3	23.4	23.5	23.5	24.7	27.4	27.6	27.6	23.1	25.1	25.5		
30.1	50.5	55.0	54.3	29.2	49.7	60.8	55.9	53.8	59.2	58.8	32.5	36.5	44.5	34.6	39.0	62.7	67.2	66.2	
24.0	38.8	38.1	41.1	25.0	35.5	39.3	40.4	43.0	40.8	42.9	25.0	40.0	35.0	35.0	25.4	39.4	41.9	40.8	
4.8	8.5	8.5	8.5	5.4	8.5	8.5	8.5	9.3	9.3	9.3	5.6	9.4	9.2	9.2	6.0	8.8	8.7	8.7	
3.2	4.8	4.6	4.6	3.1	4.6	4.3	4.4	5.1	4.4	4.5	2.9	4.5	4.0	4.0	3.4	5.2	4.9	5.0	
2.8	3.6	4.1	4.2	2.7	4.0	4.6	4.5	4.5	4.8	4.7	3.5	3.6	4.0	4.1	2.9	4.0	4.3	4.3	
8.0	8.1	8.2	8.2	8.4	9.0	9.0	6.9	7.0	6.9	6.9	9.4	9.3	9.4	9.4	9.5	9.2	9.1		
9.1	8.9	8.9	8.9	9.7	9.6	9.5	9.7	9.7	9.7	9.7	11.3	11.4	11.4	11.4	9.9	9.7	9.7		
24.5	23.8	23.7	23.7	24.6	24.5	24.1	24.5	24.7	24.7	24.7	27.4	26.1	25.9	25.9	24.8	24.3	24.3		
21.3	20.1	20.5	20.5	19.7	20.4	20.5	24.1	24.0	24.2	24.2	18.5	17.9	18.1	18.1	22.3	22.9	22.9		
9.8	10.2	10.6	10.6	9.2	9.3	10.0	10.3	10.5	10.5	10.7	8.6	9.1	10.0	10.0	9.3	9.6	9.6	9.5	
11.6	10.3	10.3	10.3	11.3	10.0	9.6	11.1	9.6	9.9	9.9	9.8	9.8	9.8	9.8	11.1	10.3	10.1		
2.1	2.6	3.3	3.3	1.6	2.0	2.6	2.7	2.2	2.6	2.2	0.7	1.4	2.2	2.2	1.7	2.3	2.8	2.8	
5.0	5.3	4.9	4.9	5.5	6.0	6.1	5.8	5.8	5.8	5.8	4.3	4.8	4.3	4.3	5.7	5.9	5.9		
4.1	4.7	5.1	5.1	4.3	4.9	5.3	3.5	3.3	3.5	3.5	4.3	5.2	6.6	6.6	5.6	4.4	5.4		
11.4	11.3	11.2	11.2	12.5	12.6	12.4	15.4	14.9	15.1	15.1	16.4	15.7	15.7	15.7	12.8	12.1	12.1		
14.9	15.0	14.9	14.9	13.8	15.3	15.5	16.2	16.1	16.7	16.7	16.9	18.5	18.5	18.5	17.5	17.3	17.3		
16.4	16.6	16.4	16.4	16.0	17.4	17.3	20.0	20.1	20.1	20.1	16.8	18.5	18.2	18.2	20.1	19.8	19.9		
12.3	12.1	11.8	11.8	12.3	13.1	13.3	22.8	23.2	22.7	22.7	15.9	16.9	16.9	16.9	13.8	12.7	12.4		
4.9	7.5	9.4	9.7	5.8	8.6	10.2	10.4	8.7	10.1	10.4	6.2	9.1	10.4	10.5	5.1	8.5	10.0	10.2	
54.0	59.2	60.4	60.0	58.0	76.0	78.6	78.4	57.6	60.5	60.5	55.0	64.3	70.5	71.1	48.3	60.1	60.4	58.7	
25.0	32.9	30.5	31.7	30.0	36.1	38.8	39.2	40.5	41.6	42.2	35.0	36.9	40.2	41.2	30.0	41.2	41.6	42.9	
17.6	15.3	15.7	15.7	20.4	20.1	18.4	18.9	16.6	16.6	16.6	14.6	10.9	10.5	10.5	20.2	18.1	18.3		
18.2	15.0	15.0	15.0	18.4	15.1	15.1	18.6	14.3	14.5	14.5	18.8	14.9	14.5	14.5	18.1	15.3	15.3		
33.4	34.3	35.0	35.0	43.4	46.2	44.0	11.4	12.6	12.4	12.4	15.5	16.6	16.3	16.3	34.4	34.2	34.7		
48.6	36.9	38.2	38.2	49.7	44.8	43.3	53.1	40.4	39.8	39.8	41.1	32.8	34.4	34.4	53.3	40.4	43.6		

* No. 3 can.

* No. 2½ can.

* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTI

Article.	Unit.	Richmond, Va.				Rochester, N. Y.				St. Louis, Mo.			
		Feb. 15—		Jan.	Feb.	Feb.	Jan.	Feb.	Feb. 15—		Jan.	Feb.	
		1913	1923	15,	15,	15,	15,	15,	1913	1923	15,	15,	
				1924.	1924.	1923.	1924.	1924.			1924.	1924.	
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
Sirloin steak	Pound	21.8	37.4	38.9	39.2	36.2	39.6	39.2	22.8	33.3	35.4	34.9	
Round steak	do	19.6	32.2	34.1	34.5	31.3	32.8	32.9	20.4	30.8	33.1	32.6	
Rib roast	do	18.9	28.9	30.3	30.3	27.9	29.4	29.4	17.6	26.5	28.4	28.5	
Chuck roast	do	14.3	21.8	22.1	22.1	21.7	23.0	23.0	14.2	17.7	18.8	18.9	
Plate beef	do	11.4	15.5	15.5	15.5	12.0	12.3	12.3	10.2	12.9	13.0	13.1	
Pork chops	do	18.4	28.4	27.5	27.2	31.3	29.1	28.7	17.1	23.5	23.1	23.2	
Bacon, sliced	do	23.4	35.4	31.2	30.8	35.1	33.9	33.3	23.0	37.6	37.3	36.2	
Ham, sliced	do	23.3	39.3	36.9	37.5	44.5	45.3	45.1	26.7	42.4	43.9	42.7	
Lamb, leg of	do	18.7	42.1	42.1	42.5	37.8	35.8	35.2	17.8	34.6	34.7	34.3	
Hens	do	20.0	36.1	34.7	34.5	40.0	37.8	38.7	17.4	32.7	31.0	31.6	
Salmon, canned, red	do	31.4	32.6	31.6	28.8	28.8	28.8	28.8	31.4	32.7	32.6	32.6	
Milk, fresh	Quart	10.0	14.0	14.0	14.0	13.0	13.3	12.5	8.0	13.0	13.0	13.0	
Milk, evaporated	15-16 oz. can.	13.0	13.6	13.7	12.1	12.1	12.1	12.1	11.5	11.3	11.3	11.3	
Butter	Pound	43.4	64.6	66.1	65.9	58.9	60.1	60.9	40.4	58.9	65.1	61.0	
Oleomargarine	do	29.6	30.2	29.2	30.2	32.2	31.2	31.2	27.2	27.8	27.8	27.8	
Nut margarine	do	27.9	29.6	29.6	26.2	29.1	29.1	29.1	24.5	25.3	25.3	25.3	
Cheese	do	22.3	38.1	36.5	36.5	37.3	37.5	37.3	20.8	36.5	35.3	35.1	
Lard	do	15.0	17.7	18.7	17.6	17.2	17.8	17.6	13.2	13.8	15.0	13.8	
Vegetable lard substitute	do	22.2	24.5	24.7	19.4	22.1	21.8	21.8	22.3	25.5	25.0	25.0	
Eggs, strictly fresh	Dozen	20.8	46.7	44.1	49.5	52.3	60.3	57.9	24.4	41.3	49.4	44.6	
Eggs, storage	do	20.0	40.0	38.7	41.7	37.6	39.0	39.2	20.0	35.0	35.2	35.2	
Bread	Pound	5.4	9.1	8.6	8.6	8.0	8.0	8.0	5.5	8.9	8.9	8.9	
Flour	do	3.3	5.0	4.5	4.5	5.0	4.4	4.5	3.0	4.1	4.2	4.1	
Corn meal	do	2.0	3.9	4.5	4.5	4.8	5.0	5.0	2.1	3.0	4.1	4.0	
Rollod oats	do	9.4	9.2	9.0	7.5	8.3	8.4	8.4	8.4	8.5	8.4	8.4	
Corn flakes	8-oz. pkg	9.7	9.6	9.6	9.7	9.5	9.5	9.5	8.8	9.1	9.0	9.0	
Wheat cereal	25-oz. pkg	26.3	26.2	25.3	24.8	24.0	24.0	24.0	23.3	23.7	23.6	23.6	
Macaroni	Pound	21.8	20.4	20.4	18.4	19.0	19.1	19.1	19.5	20.0	19.9	19.9	
Rice	do	9.8	10.8	11.1	11.1	9.4	10.0	9.9	8.6	8.5	9.2	9.2	
Beans, navy	do	11.8	10.9	10.8	11.2	10.1	10.0	10.0	11.3	9.2	9.0	9.0	
Potatoes	do	1.7	2.7	3.3	3.4	1.5	2.1	2.1	1.5	2.0	2.7	2.7	
Onions	do	5.9	7.1	7.3	5.1	5.6	5.7	5.7	5.4	5.8	5.6	5.6	
Cabbage	do	5.3	5.1	6.1	3.4	3.6	4.1	4.1	4.5	4.6	4.8	4.8	
Beans, baked	No. 2 can	11.8	11.6	11.7	11.4	11.3	11.4	11.4	11.0	11.3	11.3	11.3	
Corn, canned	do	15.5	14.7	14.7	16.3	15.8	16.0	16.0	15.1	15.5	15.5	15.5	
Peas, canned	do	19.1	20.4	20.4	18.9	19.3	19.3	19.3	16.6	17.4	17.4	17.4	
Tomatoes, canned	do	12.2	12.0	11.8	13.4	13.2	13.4	13.4	11.2	12.6	12.8	12.8	
Sugar, granulated	Pound	5.3	8.4	10.4	10.2	8.4	9.9	9.9	5.1	8.6	10.1	10.3	
Tea	do	56.0	78.5	82.7	81.8	62.3	64.0	64.0	55.0	66.3	69.2	70.5	
Coffee	do	27.4	38.4	38.5	38.3	35.9	35.4	36.0	24.3	35.0	37.0	37.4	
Prunes	do	21.5	19.1	19.0	20.3	19.6	18.9	18.9	21.9	21.6	21.1	21.1	
Raisins	do	18.5	15.1	15.1	17.7	14.4	14.2	14.2	17.9	16.1	15.5	15.5	
Bananas	Dozen	38.1	40.0	39.7	43.7	44.2	43.8	43.8	28.3	32.6	31.9	31.9	
Oranges	do	42.6	36.2	35.0	51.0	45.0	40.9	40.9	47.6	40.9	41.2	41.2	

1 No. 24 can.

PRICES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Continued.

St. Paul, Minn.		Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.				Scranton, Pa.			
Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.
			1913	1923			1913	1923						1913	1923		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
33.5	33.0	33.0	22.6	26.3	26.9	28.3	20.3	29.6	31.9	32.0	29.7	29.2	28.8	21.8	46.4	49.7	49.0
26.3	27.9	27.4	19.5	23.0	23.8	24.1	19.0	26.6	28.9	28.8	24.4	23.8	23.3	18.0	37.2	40.1	39.8
27.4	26.1	25.6	19.2	21.1	20.3	20.3	20.7	28.6	30.5	30.2	21.9	22.7	22.3	18.8	34.6	36.1	35.9
19.4	20.1	19.4	15.0	16.3	16.8	16.9	14.6	17.7	19.9	19.9	14.8	14.5	13.6	14.6	24.1	26.8	26.5
10.8	11.4	11.3	11.5	11.8	11.7	11.8	12.5	14.2	16.1	16.4	12.6	12.3	12.1	10.0	11.1	10.8	10.8
25.6	24.6	24.0	21.4	28.1	26.9	25.4	23.0	35.6	35.5	34.0	26.3	25.8	25.4	18.5	30.6	29.8	29.3
39.8	35.7	34.2	32.0	38.1	35.5	34.3	32.8	51.5	50.1	48.7	34.4	32.4	30.8	24.6	41.7	41.4	40.8
42.7	40.0	39.6	29.0	42.9	41.9	40.8	30.0	52.8	51.1	50.8	36.8	33.5	33.6	25.8	54.4	52.9	52.5
31.9	31.3	31.3	17.9	31.1	28.9	29.8	17.2	34.0	36.7	36.8	39.2	37.0	37.0	20.0	42.5	42.7	42.5
28.8	27.9	29.1	23.9	30.8	31.3	30.9	23.8	41.6	41.3	40.9	31.1	33.5	32.8	22.7	41.5	41.2	41.0
34.8	36.1	36.1	33.3	34.8	35.2	28.1	27.1	27.6	34.8	34.3	33.7	33.7	33.7	36.9	33.9	33.9	33.9
11.0	12.0	11.0	8.9	10.0	10.0	13.9	14.0	14.0	18.0	17.3	17.5	17.5	17.5	8.8	13.0	13.0	11.0
12.1	12.3	12.3	11.2	11.3	11.3	10.9	11.0	10.3	11.9	11.5	11.5	11.5	11.5	12.3	12.4	12.3	12.3
53.0	57.2	55.2	38.6	51.0	55.9	53.3	40.7	58.0	59.6	58.8	59.8	62.1	61.5	40.0	57.2	58.4	59.7
28.8	30.2	30.3	27.5	29.8	29.9	28.7	30.0	29.4	29.9	32.3	32.5	32.5	32.5	25.5	26.5	25.0	25.0
26.8	26.6	26.6	24.2	27.5	29.8	31.0	20.0	37.6	38.7	38.3	36.2	35.6	35.7	18.8	36.1	36.5	36.6
37.4	34.9	35.9	18.1	20.3	20.1	18.8	17.6	19.4	20.8	20.9	18.0	18.3	17.7	15.8	17.7	19.4	18.8
17.9	19.6	18.0	26.4	28.9	29.1	25.2	26.7	26.6	18.0	18.7	19.5	19.5	19.5	22.4	25.5	25.6	25.6
24.3	23.3	23.7	31.4	33.0	44.1	35.8	25.0	35.7	43.6	36.4	39.8	54.5	52.0	32.5	53.9	61.3	60.4
40.9	46.6	44.1	37.5	30.0	37.5	30.0	37.7	37.7	37.7	37.7	36.7	38.3	40.0	23.5	37.0	42.0	41.2
32.5	35.0	33.2	9.4	9.3	9.3	9.0	9.1	9.1	8.7	8.1	8.1	8.1	8.1	5.5	8.9	8.9	8.9
9.4	9.3	9.3	4.8	4.2	4.2	3.2	3.3	3.2	4.8	4.8	5.6	5.3	5.3	3.5	5.3	5.1	5.1
4.1	4.1	4.1	2.7	3.9	3.9	3.7	4.0	3.9	4.7	4.7	2.8	3.3	3.4	6.2	5.6	5.6	5.6
8.5	8.4	8.4	9.4	10.1	9.9	9.3	9.1	9.0	9.4	9.8	9.5	8.6	8.5	8.5	9.5	9.7	9.9
9.1	9.0	9.0	9.9	10.0	10.0	11.4	10.9	10.9	10.6	10.6	10.7	9.1	9.4	8.9	9.8	9.9	10.1
3.7	23.6	25.0	25.4	25.0	25.0	25.4	24.9	24.9	24.0	23.0	23.0	23.3	23.4	23.4	26.8	25.8	25.8
3.0	19.9	18.8	18.8	18.7	18.7	19.6	18.9	18.7	14.6	15.3	14.5	17.9	17.7	17.5	23.1	23.0	22.9
9.2	9.2	9.4	10.1	10.1	8.2	9.2	8.8	8.8	9.2	9.1	9.0	8.1	9.0	8.5	9.7	10.0	9.9
9.2	9.0	11.6	9.8	9.9	10.5	10.4	10.4	9.9	9.9	9.9	11.9	10.9	10.4	11.8	11.8	11.7	11.7
2.7	2.7	1.5	1.6	1.7	1.0	1.2	1.9	1.8	2.3	3.3	3.3	2.5	2.9	3.0	1.7	2.1	2.5
5.8	5.6	4.2	6.8	6.9	3.2	4.4	4.7	3.9	3.7	3.7	6.2	6.8	7.0	5.8	5.8	5.9	5.8
4.6	4.8	3.8	4.1	4.6	3.1	3.4	3.9	4.5	5.0	5.8	4.5	5.0	5.8	4.4	4.1	6.0	6.0
1.3	11.3	14.4	14.0	14.0	15.6	15.5	15.5	14.9	13.9	13.8	12.3	12.0	12.4	12.1	12.3	12.3	12.3
5.5	15.5	14.7	15.4	15.4	13.8	14.4	14.4	16.7	17.2	17.1	14.3	14.8	14.4	16.4	17.3	17.3	17.3
16.8	17.2	17.2	15.3	14.9	14.9	17.8	18.0	18.1	17.0	18.2	18.5	17.6	18.2	18.2	17.6	18.2	18.2
14.1	14.1	14.4	12.9	13.0	13.0	14.0	14.8	15.3	11.0	10.6	10.7	13.3	13.2	13.2	13.3	13.2	13.2
9.3	10.6	10.8	6.2	9.5	10.8	11.0	5.3	9.1	9.9	10.1	8.3	9.9	10.0	6.1	8.3	10.1	10.2
67.3	67.5	67.9	65.7	82.3	84.6	84.6	59.0	58.5	59.8	59.4	66.6	66.6	66.5	52.5	60.6	60.3	60.3
39.8	43.1	43.5	35.8	44.2	45.9	46.3	32.0	36.4	38.7	39.8	34.3	35.6	35.6	31.3	39.4	39.4	39.4
21.5	19.7	19.8	18.7	16.9	16.4	18.0	16.5	16.5	19.5	15.3	15.5	18.5	16.8	16.5	18.5	16.8	16.5
19.5	17.9	17.4	18.7	14.7	14.9	18.7	13.8	13.7	17.8	14.6	15.2	19.2	16.0	15.6	19.2	16.0	15.6
12.4	14.9	14.7	15.0	17.8	17.6	34.3	33.6	33.6	33.8	35.8	31.7	33.2	34.7	34.4	33.2	34.7	34.4
60.5	61.7	54.2	43.4	35.7	34.1	43.4	40.5	39.1	38.3	30.6	28.6	49.1	45.0	46.1	49.1	45.0	46.1

* Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES ON SPECIFIED DATES—Concluded.

Article.	Unit.	Seattle, Wash.				Springfield, Ill.				Washington, D. C.			
		Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Jan. 15, 1924.	Feb. 15, 1924.	Feb. 15, 1923.	Feb. 15—		Jan. 15, 1924.	Feb. 15, 1924.
		1913	1923							1913	1923		
Sirloin steak	Pound	Cts. 22.0	Cts. 29.8	Cts. 31.6	Cts. 31.9	Cts. 30.3	Cts. 32.3	Cts. 32.8	Cts. 25.9	Cts. 42.3	Cts. 43.3	Cts. 43.5	Cts. 43.5
Round steak	do.	20.0	25.8	26.8	27.2	29.7	32.0	32.4	21.8	35.1	36.8	36.0	36.0
Rib roast	do.	18.4	23.9	24.8	25.0	22.5	23.0	22.5	20.0	33.5	33.7	33.3	33.3
Chuck roast	do.	15.0	16.3	16.8	17.3	17.8	20.2	19.9	15.6	22.8	24.1	22.8	22.8
Plate beef	do.	11.4	13.0	13.5	13.8	12.1	13.2	12.8	10.7	12.1	13.1	12.8	12.8
Pork chops	do.	23.4	34.0	31.2	30.9	24.5	22.5	22.8	19.3	31.8	28.6	26.8	26.8
Bacon, sliced	do.	30.0	47.9	45.8	45.2	38.9	36.3	36.7	23.3	38.8	33.7	33.4	33.4
Ham, sliced	do.	29.2	49.4	49.5	49.6	42.1	43.9	43.3	28.2	54.2	52.8	51.1	51.1
Lamb, leg of	do.	18.3	33.4	32.9	33.2	37.9	38.1	37.9	21.0	40.5	40.6	39.9	39.9
Hens	do.	24.3	31.3	32.5	33.3	30.4	31.0	32.7	21.3	40.3	39.4	38.8	38.8
Salmon, canned, red	do.		31.2	30.5	30.3	32.4	34.9	34.9		27.9	27.9	27.8	27.8
Milk, fresh	Quart	9.1	13.0	12.0	12.0	11.1	12.5	12.5	9.0	14.0	15.0	15.0	15.0
Milk, evaporated	15-16 oz. can		11.2	11.0	10.7	12.7	12.6	12.8		11.7	12.4	12.4	12.4
Butter	Pound	42.6	55.5	56.8	57.0	57.1	62.8	60.7	44.0	61.9	64.0	64.1	64.1
Oleomargarine	do.		28.8	30.3	30.5	28.4	32.2	32.1		28.2	30.2	30.2	30.2
Nut margarine	do.		28.5	30.0	30.1	26.9	30.1	29.9		27.0	28.5	28.6	28.6
Cheese	do.	21.6	36.0	36.3	36.0	39.1	39.6	38.9	23.5	39.0	38.9	39.4	39.4
Lard	do.	17.9	19.1	19.3	19.2	16.9	19.0	18.0	14.4	16.9	18.1	17.2	17.2
Vegetable lard substitute	do.		24.8	27.1	27.4	23.5	27.3	28.0		23.3	25.3	25.2	25.2
Eggs, strictly fresh	Dozen	30.0	37.1	44.1	38.8	40.2	54.0	50.5	36.3	50.5	54.0	53.7	53.7
Eggs, storage	do.			35.0	35.0	32.0	39.1	39.4	20.5	40.0	36.2	40.0	40.0
Bread	Pound	5.4	8.6	9.8	9.8	9.3	10.2	10.2	5.5	8.2	9.0	9.0	9.0
Flour	do.	3.0	4.7	4.1	4.2	5.0	4.6	4.5	3.7	5.2	4.7	4.7	4.7
Corn meal	do.	3.1	4.0	4.3	4.2	4.5	5.5	5.1	2.5	3.8	4.2	4.2	4.2
Rollod oats	do.		8.5	8.5	8.8	10.4	10.8	10.8		9.2	9.2	9.2	9.2
Corn flakes	8-oz. pkg		11.8	11.6	11.6	9.8	10.1	10.1		9.4	9.4	9.4	9.4
Wheat cereal	28-oz. pkg		25.8	24.6	25.3	26.0	25.3	25.3		24.7	24.1	24.0	24.0
Macaroni	Pound		18.4	18.1	18.2	19.8	20.0	20.0		22.3	21.0	21.0	21.0
Rice	do.	7.7	10.8	11.7	11.8	9.8	10.4	10.0	9.6	10.5	10.3	10.2	10.2
Beans, navy	do.		10.8	10.2	10.3	11.9	9.5	9.4		11.7	10.0	9.6	9.6
Potatoes	do.	.9	1.6	2.4	2.4	1.9	2.5	2.5	1.5	2.5	2.8	2.9	2.9
Onions	do.		4.7	4.9	4.8	5.2	6.9	7.1		5.7	6.5	6.5	6.5
Cabbage	do.		4.9	4.7	6.2	4.8	5.6	5.5		6.0	6.2	6.7	6.7
Beans, baked	No. 2 can		15.4	16.2	16.2	13.3	13.2	12.8		12.0	11.7	11.7	11.7
Corn, canned	do.		17.2	17.4	17.6	14.6	14.9	14.9		14.8	14.8	14.8	14.8
Peas, canned	do.		18.9	19.7	19.5	17.9	18.1	18.1		16.0	16.3	16.5	16.5
Tomatoes, canned	do.		15.7	15.6	15.9	14.4	14.4	14.4		11.9	11.4	10.9	10.9
Sugar, granulated	Pound	6.1	9.6	10.6	10.8	9.3	11.2	11.5	5.2	8.0	9.7	9.9	9.9
Tea	do.	50.0	66.2	75.4	74.5	71.1	77.6	77.5	57.5	76.1	76.3	77.3	77.3
Coffee	do.	28.0	39.1	39.2	40.9	38.0	37.8	37.8	28.8	35.0	34.0	34.5	34.5
Prunes	do.		18.5	15.8	14.2	21.9	18.8	19.0		22.0	18.8	19.3	19.3
Raisins	do.		18.6	15.7	15.4	20.9	18.1	16.8		18.7	15.1	15.4	15.4
Bananas	Dozen		15.6	15.8	15.8	11.4	13.9	11.7		37.9	38.2	39.4	39.4
Oranges	do.		43.4	41.0	41.4	58.2	43.5	37.3		46.3	39.2	41.5	41.5

¹ No. 2½ can.² Per pound

Comparison of Retail Food Costs in 51 Cities:

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food⁷ in February, 1924, compared with the average cost in the year 1913, in February, 1923, and in January, 1924. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.⁸

Effort has been made by the bureau each month to have perfect reporting cities. For the month of February 98 per cent of all the firms reporting in the 51 cities sent in a report promptly. The following were perfect reporting cities; that is, every merchant in the following-named 36 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Baltimore, Boston, Bridgeport, Buffalo, Chicago, Denver, Detroit, Fall River, Houston, Indianapolis, Kansas City, Little Rock, Louisville, Manchester, Milwaukee, Minneapolis, Newark, New Haven, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Providence, Portland, Me., Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, Scranton, Seattle, Springfield, and Washington, D. C.

The following summary shows the willingness with which the merchants responded in February, 1924:

RETAIL PRICE REPORTS RECEIVED DURING FEBRUARY, 1924.

Item.	United States.	Geographical division.				
		North Atlantic.	South Atlantic.	North Central.	South Central.	Western.
Percentage of reports received.....	98	100	97	99	96	98
Number of cities in each section from which every report was received.....	36	14	5	11	3	3

⁷ For list of articles, see note 2, p. 67.

⁸ The consumption figure used from January, 1913, to December, 1920, for each article in each city is given in the MONTHLY LABOR REVIEW for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the MONTHLY LABOR REVIEW for March, 1921, p. 26.

TABLE 6.—PERCENTAGE CHANGES IN THE RETAIL COST OF FOOD IN FEBRUARY, 1924, COMPARED WITH THE COST IN JANUARY, 1924, FEBRUARY, 1923, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

City.	Percentage increase, February, 1924, compared with—		Percentage decrease, February, 1924, com- pared with January, 1924.	City.	Percentage increase, February, 1924, compared with—		Percentage decrease, February, 1924, com- pared with January, 1924.
	1913	February, 1923.			1913	February, 1923.	
Atlanta	45	4	1	Milwaukee	53	7	10.1
Baltimore	53	3	0	Minneapolis	46	3	9
Birmingham	50	3	1	Mobile		4	2
Boston	50	2	1	Newark	47	5	0.4
Bridgeport		3	1	New Haven	48	3	1
Buffalo	52	4	0	New Orleans	46	2	1
Butte		1	3	New York	53	3	1
Charleston	51	5	0.4	Norfolk		5	1
Chicago	55	6	0.2	Omaha	45	6	2
Cincinnati	46	6	2	Peoria		8	0.1
Cleveland	46	4	0.1	Philadelphia	49	3	0.1
Columbus		6	1	Pittsburgh	51	4	2
Dallas	45	3	3	Portland, Me.		2	0.1
Denver	34	2	4	Portland, Oreg.	32	1	3
Detroit	52	4	1	Providence	52	1	1
Fall River	48	1	2	Richmond	55	2	1
Houston		3	4	Rochester		3	1
Indianapolis	42	4	1	St. Louis	48	4	1
Jacksonville	44	6	0	St. Paul		2	2
Kansas City	43	4	1	Salt Lake City	25	3	2
Little Rock	39	2	1	San Francisco	43	4	2
Los Angeles	41	5	2	Savannah		2	1
Louisville	37	4	2	Scranton	51	1	2
Manchester	47	3	1	Seattle	39	4	0.1
Memphis	40	4	1	Springfield, Ill.		8	1
				Washington, D.C.	54	2	0.1

¹ Increase.

Retail Prices of Coal in the United States.¹

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, February 15, 1923, and January 15 and February 15, 1924, for the United States and for each of the cities from which prices have been obtained. Prices for coal are secured from the cities from which monthly retail prices of food are received.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds used. The coal dealers in each city are asked to quote prices on the kinds of bituminous coal usually sold for household use.

The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bins where an extra handling is necessary.

¹ Prices of coal were formerly secured semiannually and published in the March and September issues of the MONTHLY LABOR REVIEW. Since June, 1920, these prices have been secured and published monthly.

RETAIL PRICES OF COAL.

89

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1923, AND JANUARY 15 AND FEBRUARY 15, 1924.

City, and kind of coal.	1913		1923	1924	
	Jan. 15.	July 15.	Feb. 15.	Jan. 15.	Feb. 15.
United States:					
Pennsylvania anthracite—					
Stove	\$7.99	\$7.46	\$15.55	\$15.77	\$15.73
Chestnut	8.15	7.68	15.53	15.76	15.71
Bituminous	5.43	5.39	11.14	9.75	9.83
Atlanta, Ga.:					
Bituminous	5.88	4.83	10.44	8.13	8.13
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove	17.70	17.24	16.25	16.75	16.75
Chestnut	17.93	17.49	16.25	16.50	16.50
Bituminous			10.70	7.90	7.95
Birmingham, Ala.:					
Bituminous	4.22	4.01	8.36	8.23	8.23
Boston, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.50	16.00	16.00	15.30
Chestnut	8.25	7.75	16.00	16.00	15.30
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove			16.38	16.50	16.13
Chestnut			16.38	16.50	16.13
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove	6.75	6.54	13.24	13.66	13.66
Chestnut	6.90	6.80	13.24	13.66	13.66
Butte, Mont.:					
Bituminous			11.15	11.42	11.28
Charleston, S. C.:					
Pennsylvania anthracite—					
Stove	18.38	17.75	17.00	17.00	17.00
Chestnut	18.50	18.00	17.10	17.10	17.10
Bituminous	16.75	16.75	12.00	12.00	12.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove	8.00	7.80	16.18	17.00	17.00
Chestnut	8.25	8.05	16.05	17.00	17.00
Bituminous	4.97	4.65	10.79	8.69	8.73
Cincinnati, Ohio:					
Bituminous	3.50	3.38	9.42	8.09	8.50
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove	7.50	7.25	15.75	15.47	15.41
Chestnut	7.75	7.50	15.75	15.47	15.41
Bituminous	4.14	4.14	11.36	8.47	8.00
Columbus, Ohio:					
Bituminous			9.90	7.25	7.8
Dallas, Tex.:					
Arkansas anthracite—					
Egg			18.13	17.58	18.00
Bituminous	8.25	7.21	15.38	14.68	14.08
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed	8.88	9.00	17.33	16.75	16.75
Stove, 3 and 5 mixed	8.50	8.50	17.33	16.75	16.75
Bituminous	5.25	4.88	10.69	10.72	10.75
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove	8.00	7.45	16.25	16.13	15.88
Chestnut	8.25	7.65	16.25	16.13	15.88
Bituminous	5.20	5.20	11.89	9.48	9.63
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove	8.25	7.43	16.42	16.00	16.00
Chestnut	8.25	7.61	16.08	15.92	15.92
Houston, Tex.:					
Bituminous			12.83	13.17	13.17
Indianapolis, Ind.:					
Pennsylvania anthracite—					
Stove	8.95	8.00	15.75	16.50	16.75
Chestnut	9.15	8.25	15.75	16.50	16.75
Bituminous	3.81	3.70	9.62	7.10	7.21
Jacksonville, Fla.:					
Bituminous	7.50	7.00	15.00	13.00	13.00

¹ Per ton of 2,240 pounds.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1923, AND JANUARY 15 AND FEBRUARY 15, 1924—Continued.

City, and kind of coal.	1913		1923	1924	
	Jan. 15.	July 15.	Feb. 15.	Jan. 15.	Feb. 15.
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace			\$16.93	\$16.29	\$16.36
Stove, No. 4			17.88	17.38	17.38
Bituminous	\$4.39	\$3.94	8.88	8.50	8.52
Little Rock, Ark.:					
Arkansas anthracite—					
Egg			15.00	15.00	15.00
Bituminous	6.00	5.33	11.83	11.57	11.67
Los Angeles, Calif.:					
Bituminous	13.52	12.50	16.50	15.70	15.00
Louisville, Ky.:					
Bituminous	4.20	4.00	10.18	8.70	8.73
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove	10.00	8.50	18.00	18.00	18.00
Chestnut	10.00	8.50	18.00	17.50	17.00
Memphis, Tenn.:					
Bituminous	² 4.34	² 4.22	9.41	8.00	7.93
Milwaukee, Wis.:					
Pennsylvania anthracite—					
Stove	8.00	7.85	16.63	16.68	16.68
Chestnut	8.25	8.10	16.61	16.59	16.59
Bituminous	6.25	5.71	12.76	10.19	9.99
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove	9.25	9.05	17.98	18.14	18.14
Chestnut	9.50	9.30	17.93	18.08	18.08
Bituminous	5.89	5.79	13.59	11.51	11.33
Mobile, Ala.:					
Bituminous			11.00	11.07	11.07
Newark, N. J.:					
Pennsylvania anthracite—					
Stove	6.50	6.25	12.83	13.45	13.45
Chestnut	6.75	6.50	12.83	13.45	13.45
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove	7.50	6.25	15.75	16.00	16.00
Chestnut	7.50	6.25	15.75	16.00	16.00
New Orleans, La.:					
Pennsylvania anthracite—					
Stove	10.00	10.00	21.75	22.00	22.00
Chestnut	10.50	10.50	21.75	21.75	21.75
Bituminous	² 6.06	² 6.06	11.21	11.36	11.43
New York, N. Y.:					
Pennsylvania anthracite—					
Stove	7.07	6.66	15.00	14.50	14.13
Chestnut	7.14	6.80	14.90	14.50	14.13
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove			17.00	16.00	16.00
Chestnut			17.00	16.00	16.00
Bituminous			13.38	8.83	8.97
Omaha, Nebr.:					
Bituminous	6.63	6.13	11.77	10.17	10.22
Peoria, Ill.:					
Bituminous			7.04	6.37	6.47
Philadelphia, Pa.:					
Pennsylvania anthracite—					
Stove	¹ 7.16	¹ 6.89	¹ 15.13	¹ 15.75	¹ 15.71
Chestnut	¹ 7.38	¹ 7.14	¹ 15.13	¹ 15.75	¹ 15.71
Pittsburgh, Pa.:					
Pennsylvania anthracite—					
Stove	¹ 7.94	¹ 7.38	¹ 17.00	¹ 17.00	¹ 17.00
Chestnut	¹ 8.00	¹ 7.44	¹ 17.75	¹ 17.00	¹ 17.00
Bituminous	² 3.16	² 3.18	8.32	7.25	7.39
Portland, Me.:					
Pennsylvania anthracite—					
Stove			15.84	16.56	16.56
Chestnut			15.84	16.56	16.56
Portland, Oreg.:					
Bituminous	9.79	9.66	14.52	13.89	13.72

¹ Per ton of 2,240 pounds.

² Per 10-barrel lots (1,800 pounds)

³ Per 25-bushel lots (1,900 pounds.)

RETAIL PRICES OF COAL.

91

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1923, AND JANUARY 15 AND FEBRUARY 15, 1924—Concluded.

City, and kind of coal.	1913		1923	1924	
	Jan. 15.	July 15.	Feb. 15.	Jan. 15.	Feb. 15.
Providence, R. I.:					
Pennsylvania anthracite—					
Stove.....	\$8. 25	\$7. 50	\$15. 80	\$16. 35	\$16. 35
Chestnut.....	8. 25	7. 75	15. 80	16. 35	16. 35
Richmond, Va.:					
Pennsylvania anthracite—					
Stove.....	8. 00	7. 25	16. 50	16. 50	16. 50
Chestnut.....	8. 00	7. 25	16. 50	16. 50	16. 50
Bituminous.....	5. 50	4. 94	13. 30	11. 36	11. 32
Rochester, N. Y.:					
Pennsylvania anthracite—					
Stove.....			13. 45	14. 10	14. 10
Chestnut.....			13. 45	14. 10	14. 10
St. Louis, Mo.:					
Pennsylvania anthracite—					
Stove.....	8. 44	7. 74	16. 56	17. 13	17. 13
Chestnut.....	8. 68	7. 99	16. 56	17. 38	17. 38
Bituminous.....	3. 36	3. 04	8. 28	7. 22	7. 19
St. Paul, Minn.:					
Pennsylvania anthracite—					
Stove.....	9. 20	9. 05	17. 67	18. 14	18. 14
Chestnut.....	9. 45	9. 30	17. 64	18. 09	18. 09
Bituminous.....	6. 07	6. 04	13. 89	11. 59	11. 53
Salt Lake City, Utah:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	11. 00	11. 50		17. 50	17. 50
Stove, 3 and 5 mixed.....	11. 00	11. 50		17. 75	17. 75
Bituminous.....	5. 64	5. 46	8. 76	8. 50	8. 48
San Francisco, Calif.:					
New Mexico anthracite—					
Cerrillos egg.....	17. 00	17. 00	26. 75	26. 50	26. 50
Colorado anthracite—					
Egg.....	17. 00	17. 00	24. 25	24. 50	24. 50
Bituminous.....	12. 00	12. 00	17. 90	17. 22	17. 33
Savannah, Ga.:					
Pennsylvania anthracite—					
Stove.....			\$ 17. 05	\$ 17. 05	\$ 17. 05
Chestnut.....			\$ 17. 05	\$ 17. 05	\$ 17. 05
Bituminous.....			\$ 13. 67	\$ 12. 12	\$ 12. 20
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove.....	4. 25	4. 31	9. 82	10. 53	10. 53
Chestnut.....	4. 50	4. 56	9. 82	10. 53	10. 53
Seattle, Wash.:					
Bituminous.....	\$ 7. 63	\$ 7. 70	\$ 10. 29	\$ 10. 24	\$ 10. 24
Springfield, Ill.:					
Bituminous.....			4. 93	4. 50	4. 55
Washington, D. C.:					
Pennsylvania anthracite—					
Stove.....	17. 50	17. 38	15. 94	16. 33	16. 18
Chestnut.....	17. 65	17. 53	15. 94	16. 24	16. 10
Bituminous.....			10. 93	9. 04	9. 00

¹Per ton of 2,240 pounds.

²Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

³All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.

⁴Prices in Zone A. The cartage charges in Zone A were as follows: January and July, 1913, \$0.50; February, 1923, \$1.25 to \$1.75, and January and February, 1924, \$1.25. These charges have been included in the price.

Index Numbers of Wholesale Prices in February, 1924.

STRONG advances in prices of certain fuels during February caused a slight rise in the general wholesale price level as measured by the index number computed by the United States Department of Labor through the Bureau of Labor Statistics. This index number, which includes 404 commodities or price series weighted according to their commercial importance, registered 152 for February compared with 151 for the preceding month.

Among the fuels for which comparable prices were collected, Connellsville furnace coke at the ovens averaged 4 per cent higher than in January, Pennsylvania crude petroleum and gasoline averaged 21 per cent higher, mid-continent crude petroleum averaged 21½ per cent higher, and that in the California field averaged 44½ per cent higher. The increase in the group as a whole was 6½ per cent, although certain kinds of bituminous coal were cheaper than in January.

Slight increases over January prices were shown for the groups of metals and building materials, also, owing to advances in pig iron, copper, lead, tin, southern yellow pine lumber, linseed oil, and white lead.

In the group of farm products prices were slightly lower than in the month before, due to declines in cotton, cottonseed, hogs, eggs, and hay. Cloths and clothing showed a drop of 2 per cent as a result of the considerable decreases in cotton goods and silk. In the group of miscellaneous commodities cattle feed, jute, and manufactured tobacco were cheaper than in January. No change in the general price level was reported for the groups of foods and house furnishing goods.

Of the 404 commodities or price series for which comparable data for January and February were collected, increases were shown in 133 instances and decreases in 104 instances. In 167 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES.
[1913=100.]

Commodity group.	February, 1923.	1924	
		January.	February.
Farm products.....	142	144	143
Foods.....	141	143	143
Cloths and clothing.....	199	200	196
Fuel and lighting.....	212	169	180
Metals and metal products.....	139	142	143
Building materials.....	192	181	182
Chemicals and drugs.....	132	132	131
House-furnishing goods.....	184	176	176
Miscellaneous.....	126	117	113
All commodities.....	157	151	152

Comparing prices in February with those of a year ago, as measured by changes in the index number, it is seen that the general level has declined over 3 per cent. Fuel and lighting materials averaged 15 per cent lower than in February, 1923, while cloths and clothing, building materials, chemicals and drugs, house-furnishing goods, and miscellaneous commodities also were lower. Farm products, foods, and metals and metal products, on the other hand, were higher than in the corresponding month of last year.

Comparison of Retail Price Changes in the United States and Foreign Countries.

THE index numbers of retail prices published by several foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced to a common base, namely, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers compiled by the bureau, because of the fact that in some instances satisfactory information for 1913 was not available. For Belgium, Denmark, Germany, Great Britain, Norway, Sweden, and the city of Milan, Italy, the index numbers are reproduced as published in the original sources. With three exceptions all these are shown on the July, 1914, base in the source from which the information is taken. The index numbers for Belgium are computed on April, 1914, as the base period, those for Germany on the average of October, 1913, January, April, and July, 1914, while those for Milan are based on the first half of 1914. The index numbers here shown for the remaining countries have been obtained by dividing the index for each month specified in the table by the index for July, 1914, or the nearest period thereto, as published. As shown in the table, the number of articles included in the index numbers for the different countries differs widely. These results should not, therefore, be considered as closely comparable with one another. In a few instances, also, the figures here shown are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities included at successive dates.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND CERTAIN OTHER COUNTRIES.

[July, 1914=100.]

Year and month.	United States: 22 foodstuffs, to December, 1920: since that time 43 foodstuffs; 51 cities (variable). Weighted.	Australia: 46 foodstuffs; 30 towns. Weighted.	Belgium: 56 articles (variable); 59 cities. Not weighted.	Canada: 29 foodstuffs; 60 cities. Weighted.	Denmark: Family food budget; 5 persons. Weighted.	France: Family budget, 13 articles.		Germany: Family food budget; 5 persons. Weighted.
						Cities over 10,000 population (except Paris). Weighted.	Paris only. Weighted.	
July, 1914.....	100	100	¹ 100	100	100	100	100	² 100
July, 1915.....	98	131	-----	105	128	³ 123	120	-----
July, 1916.....	109	130	-----	114	146	³ 141	129	-----
July, 1917.....	143	126	-----	157	166	³ 184	183	-----
July, 1918.....	165	131	-----	175	187	³ 244	206	-----
July, 1919.....	186	147	-----	186	212	³ 289	261	-----
1920.								
July.....	215	194	453	227	253	³ 388	373	1267
August.....	203	194	463	221	-----	-----	373	1170
September.....	200	197	471	215	-----	-----	407	1166
October.....	194	192	477	213	-----	³ 450	420	1269
November.....	189	186	476	206	-----	-----	426	1343
December.....	175	184	468	200	-----	-----	424	1427
1921.								
January.....	169	186	450	195	276	³ 429	410	1423
February.....	155	184	434	190	-----	-----	382	1362
March.....	153	181	411	178	-----	-----	359	1352
April.....	149	173	399	171	-----	³ 363	328	1334
May.....	142	168	389	165	-----	-----	317	1320
June.....	141	165	384	150	-----	-----	312	1370
July.....	145	161	379	148	236	³ 350	306	1491
August.....	152	158	384	154	-----	-----	317	1589
September.....	150	154	386	159	-----	-----	329	1614
October.....	150	149	391	155	-----	³ 348	331	1757
November.....	149	146	394	149	-----	-----	326	2189
December.....	147	143	393	148	-----	-----	323	2357
1922.								
January.....	139	142	387	149	197	³ 323	319	2463
February.....	139	140	380	143	-----	-----	307	3020
March.....	136	141	371	142	-----	-----	294	3602
April.....	136	143	367	138	-----	³ 315	304	4356
May.....	136	146	365	138	-----	-----	318	4680
June.....	138	146	366	137	-----	-----	307	5119
July.....	139	148	366	138	184	³ 312	297	6826
August.....	136	149	366	141	-----	-----	289	9746
September.....	137	149	371	139	-----	-----	291	15417
October.....	140	146	376	138	-----	³ 314	290	26623
November.....	142	145	384	139	-----	-----	297	54982
December.....	144	146	384	140	-----	-----	305	80702
1923.								
January.....	141	145	383	142	180	³ 331	309	136606
February.....	139	144	397	142	-----	-----	316	318300
March.....	139	145	408	145	-----	-----	321	331500
April.....	140	152	409	143	-----	³ 337	320	350000
May.....	140	156	413	140	-----	-----	325	462000
June.....	141	162	419	138	-----	-----	331	934700
July.....	144	164	420	137	188	³ 351	321	4651000
August.....	143	165	439	142	-----	-----	328	67048500
September.....	146	161	453	141	-----	-----	339	1730000000
October.....	147	157	458	144	-----	-----	349	(⁴)
November.....	148	157	463	144	-----	-----	355	(⁵)
December.....	147	156	470	145	-----	-----	365	(⁶)

¹ April, 1914.² Average for October, 1913, January, April, and July, 1914.³ Quarter beginning month specified.⁴ 430100000000.⁵ 86200000000000.⁶ 151200000000000.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND CERTAIN OTHER COUNTRIES—Concluded.

Year and month.	Great Britain: 21 food-stuffs; 600 towns. Weighted.	Italy: Family food budget; 5 persons; Milan. Weighted.	Netherlands: 27 food-stuffs; Amsterdam. Weighted.	New Zealand: 59 food-stuffs; 25 towns. Weighted.	Norway: Family food budget. Weighted.	South Africa: 18 food-stuffs; 9 towns. Weighted.	Sweden: 21 articles; 44 towns. Weighted.	Switzerland: 9 groups of food-stuffs. Not weighted.
July, 1914.....	100	⁷ 100	⁸ 100	100	100	⁹ 100	100	¹⁰ 100
July, 1915.....	132 ¹	-----	-----	112	-----	¹⁰ 107	⁹ 124	¹⁰ 119
July, 1916.....	161	151	-----	119	¹¹ 160	⁹ 111	⁹ 142	¹⁰ 140
July, 1917.....	204	210	-----	127	-----	⁹ 124	177	-----
July, 1918.....	210	325	-----	139	279	⁹ 125	268	-----
July, 1919.....	209	310	210	144	289	⁹ 136	310	-----
1920.								
July.....	258	445	217	167	319	⁹ 178	297	246
August.....	262	454	219	171	333	-----	308	-----
September.....	267	468	223	173	336	-----	307	-----
October.....	270	480	226	177	340	-----	306	262
November.....	291	515	220	176	342	-----	303	-----
December.....	282	535	208	179	342	-----	294	-----
1921.								
January.....	278	573	199	178	334	⁹ 166	283	243
February.....	263	564	200	175	308	-----	262	237
March.....	249	582	199	169	300	-----	253	234
April.....	238	588	193	169	300	⁹ 151	248	231
May.....	232	598	189	167	292	-----	237	212
June.....	218	523	186	166	290	-----	234	210
July.....	220	506	185	164	292	⁹ 136	232	214
August.....	226	518	184	163	297	-----	234	209
September.....	225	545	184	161	290	-----	228	206
October.....	210	561	173	156	288	⁹ 128	218	200
November.....	200	570	159	152	281	-----	211	198
December.....	195	567	154	150	268	-----	202	192
1922.								
January.....	185	558	152	147	257	121	190	189
February.....	179	562	154	145	245	119	189	179
March.....	177	525	148	141	238	119	185	177
April.....	173	499	141	144	234	121	182	167
May.....	172	503	140	145	230	120	178	158
June.....	170	494	141	143	227	118	179	157
July.....	180	492	144	144	233	116	179	158
August.....	175	498	144	141	232	116	181	158
September.....	172	508	145	139	228	117	180	156
October.....	172	517	148	139	220	119	178	157
November.....	176	516	141	139	216	120	170	160
December.....	178	514	142	138	215	118	168	160
1923.								
January.....	175	513	145	139	214	117	166	161
February.....	173	500	146	140	214	117	165	160
March.....	171	493	145	141	214	117	166	158
April.....	168	494	143	142	212	117	163	161
May.....	162	499	139	143	214	118	161	164
June.....	160	502	141	142	213	118	161	166
July.....	162	496	140	142	218	116	160	168
August.....	165	490	141	143	220	115	161	167
September.....	168	496	143	145	218	115	165	167
October.....	172	502	147	146	217	117	165	168
November.....	173	503	146	147	221	120	164	170
December.....	176	500	-----	147	226	118	164	171

³ Quarter beginning month specified.⁷ January-June.⁸ Year 1913.⁹ Year.¹⁰ Previous month.¹¹ August.

Retail Prices in Denmark, July, 1923, and January, 1924.

STATISTISKE Efterretninger for February 12, 1924, issued by the Statistical Department of Denmark gives average retail prices of various commodities for specified localities for July, 1923, and January, 1924. Prices are gathered for Copenhagen, Frederiksberg, and Gentofte communes, all towns, and over 100

country districts. The information was secured during the first week of January. For retail prices for January, 1922, and January, 1923, see MONTHLY LABOR REVIEW for May, 1923, pages 107, 108.

AVERAGE RETAIL PRICES OF VARIOUS COMMODITIES IN SPECIFIED LOCALITIES
IN DENMARK, JULY, 1923, AND JANUARY, 1924.

[1 øre at par=0.268 cent; 1 kilogram=2.2046 pounds; 1 liter=1.057 quarts; 1 hektoliter=2.838 bushels.]

Article.	Unit.	July, 1923.	January, 1924.			
		Average for whole country.	Copen- hagen.	Coun- try towns.	110 country dis- tricts.	Average for whole country.
Bread:		Øre.	Øre.	Øre.	Øre.	Øre.
Rye.....	4 kg.....	107	97	105	104	102
Bolted rye.....	Kg.....	56	58	54	54	55
Wheat.....	do.....	81	81	82	80	81
Flour, fine.....	do.....	46	45	46	45	45
Flour, potato.....	do.....	54	67	63	60	63
Barley.....	do.....	48	49	48	47	48
Oats.....	do.....	88	92	88	82	87
Semolina.....	do.....	68	68	70	67	64
Rice.....	do.....	82	94	84	79	86
Sago.....	do.....	108	118	115	111	115
Peas, yellow, shelled.....	do.....	113	128	108	100	112
Peas, canned, coarse.....	1/2 kg.....	85	88	92	90	90
Sugar, loaf, No. 1.....	Kg.....	117	102	103	102	102
Sugar, brown, No. 1.....	do.....	103	88	89	89	89
Coffee.....	do.....	423	448	425	407	427
Tea, common Congo.....	do.....	847	935	891	885	904
Apples, evaporated, American.....	do.....	199	210	214	204	209
Apricots, evaporated.....	do.....	392	270	269	256	265
Prunes.....	do.....	131	179	128	117	141
Raisins, Valencia.....	do.....	195	239	198	185	207
Fish balls, Faroe Islands.....	1/2 kg.....	89	83	88	88	86
Butter.....	Kg.....	406	573	562	553	563
Margarine, animal.....	do.....	229	275	238	226	244
Margarine, vegetable.....	do.....	182	196	186	183	188
Vegetable oil.....	do.....	179	190	194	193	192
Cheese, skim-milk.....	do.....	180	226	187	175	196
Eggs, fresh, Danish.....	20.....	263	650	586	555	597
Eggs, storage.....	20.....	---	373	367	369	370
Milk, sweet.....	Liter.....	32	45	37	34	39
Milk, skimmed.....	do.....	11	16	12	11	13
Buttermilk.....	do.....	15	24	14	12	17
Beef, forequarter.....	Kg.....	216	232	208	204	215
Beef, boneless.....	do.....	317	367	292	278	312
Veal, forequarter.....	do.....	212	240	207	189	212
Pork, butts.....	do.....	236	217	247	241	235
Pork, backs.....	do.....	53	65	53	58	59
Tenderloin.....	do.....	400	482	422	416	449
Pork, salt.....	do.....	293	301	291	282	291
Mutton, forequarter, Icelandic.....	do.....	160	178	188	180	185
Ham, smoked, boneless.....	do.....	468	442	480	483	464
Pork, fat, seasoned.....	do.....	226	299	275	272	282
Sausage, summer.....	do.....	489	598	450	434	494
Herring, fresh.....	do.....	97	108	85	84	92
Codfish.....	do.....	63	120	74	79	91
Flounders.....	do.....	197	276	179	162	206
Klip fish.....	do.....	149	149	146	138	144
Cabbage.....	do.....	---	13	17	17	16
Carrots.....	do.....	(147)	28	22	20	23
Potatoes, large quantities.....	50 kg.....	---	874	686	609	723
Potatoes, small quantities.....	Kg.....	20-57	21	18	16	18
Salt, kitchen.....	do.....	18	19	18	17	18
Washing soda, American.....	do.....	16	15	16	16	16
Soap, brown, best.....	do.....	101	98	98	95	97
Petroleum, water white.....	Liter.....	30	31	29	29	30
Coal, nut, Scotch.....	H'liter.....	474	491	485	490	489
Coke, crushed, delivered.....	do.....	375	451	411	426	429
Electricity.....	Kilowatt.....	62	50	65	66	60
Gas.....	Cu. m.....	36	30	36	39	35
Kindling.....	Kg.....	11	11	10	10	10
Shoes, men's, boxcalf, sewed.....	Pair.....	2,449	2,498	2,410	2,408	2,439
Soling and heeling—men's shoes.....	do.....	827	837	834	788	820

WAGES AND HOURS OF LABOR.

Earnings of Male and Female Workers in Massachusetts Manufacturing Establishments, January, 1924.

THE following figures showing average weekly earnings of male and female wage workers in 349 establishments of Massachusetts in January, 1924, were given to the press by the Department of Labor and Industries of that State:

EMPLOYMENT AND EARNINGS OF MALE AND FEMALE WORKERS IN REPRESENTATIVE MANUFACTURING ESTABLISHMENTS IN MASSACHUSETTS IN JANUARY, 1924.

Industry.	Establishments reporting.	Number of employees on pay roll.			Average weekly earnings.		
		Males.	Females.	Total.	Males.	Females.	Total.
Automobiles, including bodies and parts.....	5	1,558	80	1,638	\$29.18	\$18.73	\$28.67
Boot and shoe cut stock and findings.....	31	984	324	1,308	25.30	14.68	22.67
Boots and shoes.....	29	3,329	2,113	5,442	26.19	17.70	22.89
Boxes, paper.....	18	2,138	1,745	3,883	28.43	17.41	23.48
Bread and other bakery products.....	11	956	430	1,386	27.14	14.20	23.13
Clothing, men's.....	10	173	319	492	33.29	15.53	21.77
Clothing, women's.....	10	64	524	588	36.52	18.72	20.66
Confectionery.....	7	916	1,764	2,680	25.90	15.48	19.04
Cotton goods.....	7	1,541	1,364	2,905	26.86	20.69	23.96
Cutlery and tools.....	10	995	98	1,093	26.54	16.00	25.60
Dyeing and finishing textiles.....	5	1,970	680	2,650	27.45	18.42	25.13
Foundry and machine shop products.....	14	2,309	125	2,434	27.59	18.58	27.12
Furniture.....	13	1,190	182	1,372	29.66	17.22	28.01
Hosiery and knit goods.....	3	253	707	960	29.23	16.95	20.19
Jewelry.....	13	423	228	651	27.22	16.84	23.58
Leather, tanned, curried, and finished.....	13	4,151	232	4,383	28.13	14.67	27.42
Machine tools.....	5	1,099	114	1,213	28.78	16.46	27.62
Paper and wood pulp.....	14	2,610	777	3,387	30.33	16.40	27.13
Printing and publishing, book and job.....	22	673	192	865	34.74	22.56	32.04
Printing and publishing, newspaper.....	13	419	75	494	34.53	26.66	33.34
Rubber goods.....	6	2,273	371	2,644	25.33	14.30	23.78
Rubber tires and tubes.....	3	2,948	694	3,642	30.26	19.53	28.22
Silk goods.....	8	879	1,159	2,038	24.43	15.21	19.19
Slaughtering and meat packing.....	3	1,403	89	1,492	23.79	13.62	23.13
Stationery goods.....	4	202	374	576	31.03	15.62	21.03
Textile machinery and parts.....	3	2,450	165	2,615	30.62	16.51	29.73
Tobacco.....	6	710	308	1,018	28.69	17.32	24.83
Woolen and worsted goods.....	13	2,306	1,650	3,956	26.27	17.93	22.80
All other industries.....	50	21,810	4,478	26,288	29.58	16.64	27.37
Total.....	349	62,732	21,361	84,093	28.53	17.00	25.63

It will be noted from the above table that the total number of males employed by the 349 reporting establishments was nearly three times the number of females employed. The average weekly wage of the males was \$28.53, that of the females, \$17. It is explained that "the higher earning capacity of males is found, no doubt, in the fact that a much larger proportion of males than females is employed in the more highly skilled occupations and in those occupations in which not only skill but physical strength is requisite."

Average Weekly Earnings in Factory Employments in Wisconsin.

THE following statement from the Industrial Commission of Wisconsin shows the average weekly earnings in factory employments in that State by months in the latter half of 1920 and in the calendar years 1921, 1922, and 1923.

AVERAGE WEEKLY EARNINGS IN WISCONSIN FACTORY EMPLOYMENTS, JULY, 1920, TO DECEMBER, 1923.

Month.	1920	1921	1922	1923
January.....		\$24.98	\$19.82	\$22.40
February.....		24.16	21.44	23.05
March.....		24.34	20.75	23.18
April.....		24.02	21.02	23.72
May.....		23.30	21.72	24.88
June.....		23.01	21.94	24.73
July.....	\$27.73	21.04	20.66	22.90
August.....	29.81	22.75	21.75	24.25
September.....	29.30	21.69	22.15	24.26
October.....	29.45	21.72	22.74	25.05
November.....	28.24	21.40	23.32	25.02
December.....	26.87	21.42	23.28	24.30
Monthly average.....	28.57	22.82	21.71	24.00

Wages in Hongkong in December, 1923.

THE average daily wages of Chinese workers in various occupations in Hongkong are reported as follows in a consular report dated December 24, 1923:

DAILY WAGES (IN HONGKONG DOLLARS) OF CHINESE WORKERS IN HONGKONG IN DECEMBER, 1923.

[Hongkong dollar=55.8 cents.]

Occupation.	Average daily wages.	Occupation.	Average daily wages.	Occupation.	Average daily wages.
Welders.....	\$2.50	Ironsmiths.....	\$1.60	Painters.....	\$1.20
Shipbuilders.....	1.80	Tinsmiths.....	1.60	Calkers.....	1.20
Pattern makers.....	1.80	Electricians.....	1.60	Bricklayers.....	1.00
Machinists.....	1.60	Engravers.....	1.60	Masons.....	1.00
Brass finishers.....	1.60	Sailmakers.....	1.50	Cement workers.....	1.00
Fitters.....	1.60	Joiners.....	1.40	Polishers.....	1.00
Coppersmiths.....	1.60	Plumbers.....	1.40	Laborers.....	.80
Boiler makers.....	1.60	Carpenters.....	1.40		
Blacksmiths.....	1.60	Riggers.....	1.30		

Working Hours in Shanghai Silk Factories.

A CONSULAR report dated January 21, 1924, states that 68 silk filatures in Shanghai have agreed to a uniform number of working hours. The length of the working-day is to be 12 hours, including one-half hour for breakfast, one hour for lunch, and another half hour for the women to care for their children, thus reducing the actual hours of work to 10. This agreement conforms with the regulations of the Chinese Ministry of Agriculture and Commerce. Work starts at 5.30 a. m. from May to September and at 6 a. m. from October to April. The Silk Reeling Guild of Shanghai has decided to prohibit the employment of children under 12 years of age in the filatures.

MINIMUM WAGE.

Work of British Trade Boards.

AT THE time the first trade boards were established in England they attracted wide attention as an attempt to solve the problem of fixing wages in sweated trades, and numerous reports were published of their methods and results. The outbreak of the war turned attention in other directions, and of late there has been little material available to show how they have stood the test of time and the strain of post-war conditions. To meet this lack a volume has recently been issued, entitled "The British Trade Boards System," containing the results of a study carried on in 1921 and 1922.¹

The growth of the system is traced at some length. The original act under which the boards were established was passed in 1909, and applied only to four trades, mentioned in its text. It provided, however, that the Board of Trade might, subject to confirmation by Parliament, extend the law to other trades, and under this authorization trade boards were set up in 1913 in five new trades. Then came the war and the troubled times of readjustment, for which it was felt that preparation must be made in the hope of securing some measure of economic stability during the transition times. For the well-organized trades it was felt that the Whitley councils would meet the needs. For the others, an extension of the trade boards principle was advised, and accordingly the trade boards act of 1918 was passed, becoming operative in October of that year. Under its terms some 51 trade boards were set up, so that by the end of 1922 there were in existence 63 boards, covering 39 trades and affecting the wages of approximately 3,000,000 workers.

The author points out that the trade boards system, as it has developed, is bipartite.

Legislative power is vested in the trade boards. Administrative and executive functions rest with the Ministry of Labor and have in practice involved four distinct features: (1) Setting up of boards, (2) confirmation of rates, (3) enforcement of legal rates, (4) decision on questions of demarcation and scope.

Application for the establishment of a trade board may come from either the employers or the employees, or from both acting together. If, after investigation, the Minister of Labor considers that conditions justify granting the request, he issues an order applying the act to the trade, and a board is set up, consisting of an equal number of employer and worker members, plus several independent persons called "appointed members." The board is empowered to fix minimum rates of wages, effective for men as well as for women. It must give at least two months' notice of its intention of fixing a rate, and at the end of that time must consider all the objections which have been lodged with it before it proceeds to the actual fixation. The average time required for fixing a rate, since 1914, has been from three to four months. A rate declared by a board must be confirmed by the Minister of Labor before it becomes effective. At his discretion he may refer it back to the board for further consideration, so that there may be considerable delay in bringing it into operation. The boards have power to make special rates for begin-

¹ Sells, Dorothy: *The British Trade Boards System*. London, 1923. 293 pp.

ners and apprentices, and to issue exemptions for workers who through infirmity or physical injury are not able to do normal work, but who nevertheless desire employment and can be of some service.

The author takes up in great detail the methods employed by the trade boards in fixing rates, and the effect of their work along various lines. The effect upon wages is of course the most immediate. Up to 1918 the trade board rates did not tend to become the maximum wages in a trade, but since the industrial depression, with its widespread reductions in wages, there has been a tendency to bring them down to the lowest rates the trade board decisions permit. In general, however, the effect of the trade boards has been good.

Not only have the poorest paid workers received increments which enabled them to live above the subsistence level, but the semiskilled and even the skilled workers in a number of trades have also, for the first time, been paid a wage which is in any sense commensurate with the skill required of them, and with the standard of living which convention, to say nothing of health and efficiency, makes it necessary for them to maintain. In addition, the workers themselves have had an opportunity to take part in wage fixing. In the long run, even though at present they are unappreciated, these will be found to be most important contributions to industrial well-being.

Being empowered to fix rates for overtime work, the boards have also the right to declare the normal number of hours per week or per day for a trade. In effect, this amounts to the right to fix normal hours. In general the boards have used this right to help along the movement for an 8-hour day and a 48-hour week.

Over a period of 14 years, trade boards appear to have been effective both in reducing the normal number of hours per day or per week, and the amount of overtime as such, for the majority of employers will not, at present, pay rates at one and a quarter times the normal rate if they can get the work done within the 48 hours by better planning, by speeding, or by employing more workers. * * * Employers in general have found very little fault with trade board regulations concerning hours, the probable reason being that there has been no tremendous rush of work during the period in which overtime rates have been in operation. Relatively little violation of the regulations in matters of hours and overtime rates has been discovered.

The effect of the trade board system upon the unionization of the workers has been doubtful. It was supposed that it would lead directly to the better organization of both employers and employees, in order that each side might present its case more effectively. In the early period this appears to have been the result, but since the war the industrial depression has had its natural effect, and organization on both sides has languished. Many of those who have fallen out under pressure of hard times will doubtless return as the situation improves.

But one has also to consider the fact that permanent organization of workers in trade board trades is seriously hampered because a great proportion of the workers are women, which means a constantly fluctuating personnel, and because the entire body of workers in most trades has little or no skill, tradition or solidarity of any kind. Trade boards seem at times to have proved valuable in augmenting organization, but their effect has at other times been overridden by more powerful economic circumstances.

The effect of rate fixation upon employment receives considerable attention. Before the boards were established it was argued that setting a fixed minimum wage would drive the slower and less competent workers out of the industry and would place the employers at a disadvantage as compared with foreign competitors who were not subject to such regulation, and that in both ways it would tend to decrease employment. These fears disappeared soon after the boards began their work. Undoubtedly there were cases in which less able

workers were discharged because employers did not consider them worth trade board wages, and in which small employers were forced out of business because they could no longer employ workers at sweated wages. In other words, there was a tendency to eliminate the less efficient, whether they were employers or employed, but this did not produce any noticeable results in the way of unemployment.

After the depression of 1920 set in, however, the complaint was made again, and far more earnestly, that the necessity of paying trade board rates was driving employers out of business and causing much unemployment. After a careful study of the situation in separate trades, the conclusion was reached that this complaint had little or no foundation. The unemployment figures for December, 1922, showed eight groups of trades in which 20 per cent or over of the workers were unemployed. One of these groups included the manufacture of nuts, bolts, screws, chains, and anchors. Wages for chain making were under trade board regulation, but with this exception, none of the groups of trades showing the highest percentages of unemployment were affected by trade board activities. On the other hand, 28 trade groups showed less than 10 per cent of their workers unemployed, and of these 10 were trades to which a board applies in at least one branch of the group.

These figures seem to indicate that trade board trades are perhaps in a slightly better position on the whole as regards unemployment than other trades, but any such generalization is hardly justifiable because of the interaction between the conditions in the one trade and those of another.

Some space is devoted to the attack on the trade boards which followed the industrial depression. As unemployment increased and wages in unregulated trades went down, employers began to complain that the trades in which trade board regulations applied were at an unfair disadvantage and were suffering severely from the restrictions imposed by the boards. A committee which held numerous hearings and called witnesses representing all interests was appointed to investigate the complaints. The hearings seemed to show that there was much less opposition to the boards on the part of employers than the public had been led to believe, that the chief demand of the opponents of the system was not for its abolition but for some modifications in its operation, and that the complaints in general were directed quite as much against the administration of the act, which was a mere matter of policy, as against the results of wage fixing. As a result of the hearings, a bill was presented in Parliament in May, 1923, proposing various changes in the acts which would have tended to limit the work of the trade boards. This met with so much opposition that it failed of passage in the last Parliament, and with the coming in of a Labor Government there is little likelihood of its being revived.

Summing up the situation, the author feels that while the trade boards system is not perfect, it has justified itself.

The British trade boards system has been in operation for more than 13 years, and during that time profound changes, political, economic, and social, have occurred. It has defects, but a careful study of its operation over that period of years can hardly fail to convince the unprejudiced that its merits greatly outweigh its faults, and that what is required is not repeal of the acts, nor alteration of the general principles embodied in the act of 1918, but rather amendment such as will improve the machinery for wage fixation, and some changes in the policy of administration and the methods of the boards.

CHILD LABOR.

Trend of Child Labor in New York State.

THE New York State Department of Labor has recently issued a bulletin, prepared by the bureau of women in industry, showing the situation in regard to child labor in 1922 as compared with 1910. The study is confined to children 14 and 15 years old, as the State laws do not permit the steady employment of children younger than this, nor did they until 1921 require employment certificates for those who have reached 16.

Taking first the census figures for the number and proportion of children gainfully employed in the State and in the city of New York, the following distribution is shown:

NUMBER AND PROPORTION OF CHILDREN 14 AND 15 YEARS OF AGE EMPLOYED IN NEW YORK, 1910 AND 1920.

Item.	1910		1920	
	Number.	Per cent of total in age group.	Number.	Per cent of total in age group.
Employed in State:				
Boys.....	35,757	24	27,294	17
Girls.....	24,485	16	19,730	12
Total.....	60,242	20	47,024	14
Employed in New York City:				
Boys.....	20,696	26	17,773	20
Girls.....	16,539	20	13,626	15
Total.....	37,235	23	31,399	18

Both the State and the city, it will be noticed, show a falling off in the number and proportion of children gainfully employed, and this in spite of an increase in population. It is suggested that restriction of immigration may account for a part of this decrease, "as children of newly arrived immigrants have formed a considerable proportion of the number of employed children." No explanation is offered of the fact that in the State the boys show a greater decrease, absolutely and relatively, than the girls.

School attendance figures show that for the State as a whole the percentage of 14 and 15 year old children attending school rose from 78.7 in 1910 to 81.5 in 1920, while for New York City the increase was from 75.5 per cent to 78.1 per cent. School attendance figures taken without distinction of age show that from 1910 to 1922, inclusive, the high schools had a much greater increase in attendance, proportionately, than the elementary and vocational schools, a fact which is attributed, in part at least, to the working of the continuation-school law.

This law has been in effect since 1920 and has increasingly applied to larger groups of children. Children evidently have been influenced to complete the educational requirements in full-time schools, rather than to go to work and be obliged to attend continuation-school courses while employed.

A study of employment certificates for children 14 and 15 years old going to work shows that the number issued in New York City fell from 36,350 in 1910 to 32,492 in 1922. The movement, however, has been very irregular, reflecting both industrial conditions and the establishment of stricter requirements for entering industry.

Summing up the situation, then, the report shows that since 1910 there has been a reduction in the number of children reported as gainfully employed and an increase in the number attending school. A number of causes, it is pointed out, have combined to produce this result.

Educational standards have been raised by the requirement of further schooling before children may go to work, and by the operation of continuation schools. Legislation has increasingly limited the occupation at which children may work, and has further restricted the hours during which they may be employed. Closer supervision of children who have left school to enter industry has been brought about by a tightening of the provisions of the employment certificate law. There has been a general strengthening of the administrative side of the law and an improvement in methods of enforcement.

The fact remains, however, that according to the latest census enumeration there are 47,024 14 and 15 year old children at work in New York State. The problem of child labor, then, is neither solved nor eliminated. Rather there is serious danger that, since the worst evils of child exploitation have been abolished, there will be a slackening of effort and the public will not perceive the defects and inadequacies in existing conditions.

Child Labor on Norfolk (Virginia) Truck Farms.

THE Children's Bureau has recently published a study of the work of children on truck farms in the vicinity of Norfolk, Va.¹

In this region, it is pointed out, is carried on what is probably the most intensive truck farming in the United States. Practically all kinds of vegetables as well as melons and many of the small fruits are grown, and with some of the vegetables two crops a year are common. The farms are comparatively small, but are thoroughly cultivated, and the variety of products means a long working season. Much of the work can be done by children.

In the regions selected for study every farm was visited, and interviews were held with every family in which a child under 16 had worked on a farm during the preceding year. The study was made in May, June, and July, 1923. Data were gathered concerning 895 children in 502 families. The children, all colored, lived for the most part in neighboring villages, or in Norfolk, and came out to the farms daily. They were employed for the most part in harvesting the various crops, though a comparatively small group had done work of all kinds. Girls were seldom employed for general farm work, such as plowing, harrowing, and cultivating, but were employed for lighter work quite as freely as boys. Of the group studied, 426 were boys and 469 girls. One-fifth (20.4 per cent) of the group were 14 but under 16 years old, 52.3 per cent were 10 but under 14

¹ U. S. Department of Labor. Children's Bureau. Child labor and the work of mothers on Norfolk truck farms. Washington, 1924. 27 pp. Bureau publication No. 130.

years, and 26.3 per cent were under 10, the ages of 0.9 per cent were not reported. To a considerable extent they were employed on light work, but this was not always the case, and some had worked very long hours.

One hundred and fifty-six (one-sixth of those included in the study), of whom 109 were under 14 years of age, had worked more than 8 hours a day, and 76, of whom 57 were under 10 years, had worked from 10 to 14 hours. Even picking, one of the simplest kinds of work done by the children, means crawling along on the ground or stooping over under the hot sun, or, as in cutting kale or spinach, exposed to the cold and dampness of winter, and when prolonged for these hours becomes laborious.

The earnings of the children were small, their hourly rates ranging from less than 5 cents up to 40 cents and over; only 3 children, 15 years old, were in this last wage group. Daily earnings, for the 452 for whom they were ascertained, ranged from less than 25 cents to \$1.25 and over; 42.7 per cent earned less than 50 cents; 40 per cent earned 50 cents but less than \$1; and 17.3 per cent earned \$1 or over. In a number of cases the economic condition of the children's families made it probable that even these small earnings were an important contribution to the family income, and in some cases they were probably felt to be indispensable. In this respect it is pointed out as significant that 90 per cent of the mothers in these families were gainfully employed, 370 of them working on truck farms.

One of the unfortunate features of farm work for the children was its interference with school attendance. Of 606 of the children studied, for whom school attendance reports were secured, 27 per cent had attended less than half the school term, and only 53 per cent had attended as much as 70 per cent. "Farm work was the chief cause of absence, according to statements made by the children's parents." Retardation was general and severe.

The extent of retardation among the children included in the study was greater than that among any other group of rural child workers studied by the Children's Bureau. * * * Of 571 children 8 to 15 years of age who reported their grade in school, 486, or 85 per cent, were below the grades which they should have reached according to the commonly accepted standard of progress; over one-half of the retarded were three or more years below the grades considered normal for their ages. Among colored children working on truck farms in Maryland, both in Anne Arundel County near Baltimore and in the peninsula counties, where the Children's Bureau has made studies of farm work and school attendance, about 71 per cent were found to be retarded.

In order to improve the conditions found in this investigation, it is recommended that some legal regulation should be adopted fixing a minimum age and a maximum working-day for children on truck farms; that fatherless families really in need should receive aid under the State mothers' pension act so that the temptation to put the children to work would be reduced, and that the compulsory school attendance law should be strengthened.

LABOR AGREEMENTS, AWARDS, AND DECISIONS.

Recent Decisions of the Railroad Labor Board.

Wages and Working Rules.

Telegraphers.

WAGE increases ranging from 2 to 5 cents an hour, punitive overtime pay for the ninth hour, and certain other changes in working conditions were granted telegraphers and allied crafts on certain railroads by decisions Nos. 2025 and 2115, effective November 16, 1923, and January 16, 1924, respectively. Twenty-seven carriers are named in the decisions. The classes of employees affected are telegraphers, telephone operators, agents (except at nontelegraph stations), agent telegraphers, agent telephoners, towermen, levermen, tower and train directors, block operators, and staffmen. The decision does not grant horizontal increases as heretofore, the policy of the board in this decision being to equalize the wages of employees of the same classification in the same territory. The board does not attempt to fix differentials as between rates for different positions on the same carrier, but suggests such adjustments by mutual agreement.

In the opinion of the board the overtime work of the majority of this class of employees is so largely under the control of the carrier that the time and a half rule will not impose any appreciable burden.

The rules governing working conditions of these classes of employees appeared in the MONTHLY LABOR REVIEW for April, 1922 (pp. 121-124). Except for the change noted above relative to the overtime rate for the ninth hour, and the changes noted below, the old rules were reaffirmed by the board.

To rule 5 (call rule) and rule 7 (starting time) the following paragraphs are added:

RULE 5.—For continuous service after regular working hours, employees will be paid time and one-half on the actual minute basis. Employees shall not be required to work more than two hours without being permitted to go to meals. Time taken for meals will not terminate the continuous-service period and will be paid for up to 30 minutes.

RULE 7.—* * * The spread of the starting time shall be fixed by agreement between the duly authorized representatives of the carrier and the duly authorized representatives of the employees. * * *

The 30-minute rule with overtime pay in case the meal period is not allowed within the agreed time limit and is worked, which was in effect during the war, was restored (rule 6).

Questions of vacations and sick leave with pay are left to mutual determination by the parties.

Clerks and Station Employees.

Disputes between clerks and station employees, represented by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, and certain carriers were disposed

of by decision No. 1986, effective October 16, 1923. This decision makes applicable to the 40 roads involved the rules relative to overtime, Sunday and holiday work, vacations and sick leave which were promulgated by the board in decisions 1621 and 1668,¹ applying to certain other carriers.

Wage provisions of the decision grant increases of 1 or 2 cents on most of the roads. This decision restores in part the decreases ordered by decision 1074, effective July 1, 1922.² Following is the schedule of increases:

CLERICAL AND STATION FORCES.

SECTION 1. Storekeepers, assistant storekeepers, chief clerks, foremen, subforemen, and other clerical supervisory forces, 2 cents.

SEC. 2. (a) Clerks with an experience of two (2) or more years in railroad clerical work, or clerical work of a similar nature in other industries, or where their cumulative experience in such clerical work is not less than two (2) years, 2 cents.

(b) Clerks with an experience of one (1) year and less than two (2) years in railroad clerical work, or clerical work of a similar nature in other industries, or where their cumulative experience in such clerical work is not less than one (1) year, 2 cents.

SEC. 3. (a) Clerks whose experience as above defined is less than one (1) year, 1 cent.

(b) Clerks without previous experience hereafter entering the service (and those now in the service on a monthly rate) shall be paid at the rate of two dollars and thirty-five cents (\$2.35) per day for the first six months and two dollars and seventy-five cents (\$2.75) per day for the second six months.

SEC. 4. Train and engine crew callers, assistant station masters, train announcers, gatemen, and baggage and parcel-room employees (other than clerks), 2 cents.

SEC. 5. Janitors, elevator operators, office, station and warehouse watchmen, and employees engaged in assorting waybills and tickets, operating appliances or machines for perforating, addressing envelopes, numbering claims and other papers, gathering and distributing mail, adjusting dictaphone cylinders, and other similar work, 1 cent.

SEC. 6. Office boys, messengers, chore boys, and other employees under 18 years of age filling similar positions, and station attendants, no increase.

SEC. 7. Station, platform, warehouse, transfer, dock, pier, storeroom, stockroom, and team-track freight handlers or truckers, and others similarly employed, 1 cent.

SEC. 8. The following differentials shall be maintained between truckers and the classes named below:

(a) Sealers, scalers, and fruit and perishable inspectors, one cent (1 cent) per hour above truckers' rates as established under section 7.

(b) Stowers or stevedores, callers or loaders, locators and coopers, two cents (2 cents) per hour above truckers' rates as established under section 7.

The above shall not operate to decrease any existing higher differentials.

SEC. 9. All common laborers in and around stations, storehouses and warehouses, not otherwise provided for, 2 cents.

SEC. 10. Telephone switchboard operators, no increase.

Interpretation No. 1 to this decision applies these increases to the rates heretofore established by the board in decisions Nos. 2, 147, 1074, and 1621. A labor member of the board dissents from this interpretation on the ground that certain employees receiving a rate of pay different from that established by the board in these previous decisions will not benefit by the increase. This interpretation, says the dissenting opinion, reestablishes inequalities in rates of pay as between employees of the same class, which had been corrected by mutual agreement by modifying rates set by the board.

¹These rules were published in the MONTHLY LABOR REVIEW for May, 1923, pp. 153, 154.

²See MONTHLY LABOR REVIEW for August, 1922, p. 116-119.

Employees of the Southeastern Express Co. represented by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees are granted time and one-half rates for all overtime, including the ninth hour of work and holiday work, one day's rest in seven, and other changes in their agreement with the company by decision No. 2132 of the Railroad Labor Board effective February 1, 1924. The rules governing overtime and Sunday and holiday work for the group of workers employed by express companies are now similar to those governing this class of employees employed by the railroads and noted in the MONTHLY LABOR REVIEW for May, 1923 (pp. 152, 153).

Maintenance-of-Way Men and Railway Shop Laborers.

Maintenance-of-way employees and railway shop laborers on seven carriers were granted hourly wage increases of one or two cents per hour by decision No. 2049. This class of employees and other carriers were able to reach an agreement upon wages without reference to the board. This decision, which became effective December 1, is retroactive to June 1, 1923.

Signalmen.

Signalmen on 32 roads were denied an increase in wages by decision No. 1983, dated October 9, 1923. To the majority decision in this case are appended a dissenting and two supporting opinions.

Marine Service, San Francisco Harbor.

In the opinion of the board wage increases for certain classes of employees engaged in marine service in San Francisco Harbor are justified by certain local conditions affecting these classes, especially rates paid for comparable service at other points. The following data show the wages prior to adjustment by the board, the increases asked by the Ferry Boatmen's Union of California and the Marine Engineers' Beneficial Association, and the scale granted by the board, which became effective December 1, 1923. These decisions (Nos. 2045 and 2046) affect the Southern Pacific Co., the Atchison, Topeka & Santa Fe Railway System, Northwestern Pacific Railroad, and the Western Pacific Railroad Co.

PREVIOUS AND PROPOSED WAGES AND WAGES FIXED BY RAILROAD LABOR BOARD FOR CERTAIN CLASSES OF EMPLOYEES IN MARINE SERVICE IN SAN FRANCISCO HARBOR.

Class.	Previous wages per month.	Proposed wages per month.	Wages fixed by board's decisions.
Chief engineers.....	\$225. 00	\$260. 00	\$235. 00
Assistant chief engineers.....	213. 75	248. 75	223. 75
Assistant engineers.....	165. 00	200. 00	175. 00
Firemen.....	126. 35	156. 35	136. 35
Deck hands.....	119. 40	149. 40	129. 40
Cabin watchmen.....	119. 40	149. 40	129. 40
Night watchmen.....	100. 00	130. 00	110. 00

Sleeping-Car Conductors.

Increases in wages and changes in working rules of sleeping-car conductors employed by the Pullman Co. and represented by the Order of Sleeping-Car Conductors were granted by the Railroad Labor Board in decision No. 2052, effective December 1, 1923. The new scale of wages is as follows:

RATES OF WAGES PER MONTH FOR SLEEPING-CAR CONDUCTORS, EFFECTIVE DECEMBER 1, 1923.

Term of service.	Rates of wages.	
	Per month.	Per hour.
First year.....	\$150.00	Cents. 62.50
Over 1 year to 2 years.....	160.00	66.67
Over 2 years to 5 years.....	167.50	69.79
Over 5 years to 10 years.....	175.00	72.91
Over 10 years to 15 years.....	180.00	75.00
Over 15 years.....	185.00	77.08

The amended rules govern rest periods, seniority, and grievances, and provide for punitive overtime rates of pay for time in excess of 270 hours per month.

Wrecking Service.

Wrecking-service employees should be paid continuous time from time called until returned to home station for all time working, waiting, or traveling, at the rate of straight time for straight-time hours and overtime for hours recognized at home stations as overtime hours, the board declared in interpretation No. 4 to decision No. 222, dated November 8, 1923.

Liability of New Management to Apply Decisions Made During Receivership.

BY AN order dated January 7, 1924, the Railroad Labor Board has reopened dockets Nos. 1319 and 2150, involving disputes between the Toledo, St. Louis & Western Railroad and the Order of Railroad Telegraphers. These cases involve disputes growing out of the abolition of express commissions by the carrier and the abrogation of the working rules of the employees as embraced in the agreement negotiated by the union. These disputes were disposed of by the board while the carrier was in the hands of a receiver. The road has now been consolidated with the New York, Chicago & St. Louis Railroad Co. and the question of the liability of the present management to apply these decisions has arisen.

The carrier stated its readiness to meet a committee of employees of the district involved to undertake to reach an agreement with respect to matters in controversy, but would not negotiate with the system representative of the union. Further, the carrier contended that it was not answerable for the abolition of express commissions or the abrogation of the agreement by the Toledo, St. Louis & Western, because the action of the carrier was taken by the receiver and authorized and approved by a Federal court, and in any event those

matters were closed by the orders and decrees terminating the receivership, which orders and decrees are binding alike upon the present ownership of the carrier, its employees, and the Railroad Labor Board.

The union took the position that the application of the decisions was incumbent on the carrier under its new ownership and asked that the board declare the carrier a violator of decisions 1367 and 1789 (dockets 1319 and 2150).

The board held that the decision should be reopened for the determination of the question now in dispute—i. e., the liability of the present ownership of the carrier to apply said decisions—and ordered the parties to confer in regard to this controversy; if an impasse had already been reached, the board directed that the question be argued orally before it by both parties.

It was further directed that the parties proceed on or before January 21, 1924, to confer and endeavor in good faith to negotiate an agreement covering all such questions as to rules and rates of pay and express commissions as may be in dispute, and in case of disagreement that the matters be submitted to the board in accordance with the law.

The board held that the negotiations should be conducted for the employees by their system and district representatives and in case the matter could not be agreed upon, the dispute as to who shall execute the agreement should be submitted to the board.

Contract Work.

AN instance of what the board considers bona fide contracting out of work³ may be noted in its decision No. 2131, dated February 5, 1924. In this instance the railroad involved—the Southern Pacific lines in Texas and Louisiana—let the contract for the operation of a gravel pit which it owned, and the train and engine crews handling transportation work in connection with the operation of the pit were considered to be in the employ of the contractor and not subject to rules relative to seniority and wage rates which applied to such employees in the service of the carrier. The brotherhoods asked that employees manning the trains used in such operations be chosen from seniority rosters of the carrier and paid the rates prevailing on the carriers' property for such service.

In the opinion of the board the evidence showed that the contract in this case was entered into in good faith and not merely for the purpose of evading compliance with conditions established by agreements or decisions of the board. The contractor was previously engaged in the gravel business and had not been on the carrier's pay roll. The carrier owns other gravel pits which have been operated by contractors, in one instance at least as far back as 1911. On the other hand, the carrier has at various times operated its own pits and purchased gravel from pits not owned by it. The request of the employees was denied.

In another case (see decision No. 2080, dated January 19, 1924) the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees protested the contracting by the

³ For decisions re "illegal" contract work, see MONTHLY LABOR REVIEW for June, 1922, pp. 107-112, and January, 1923, pp. 104-106.

Lehigh Valley Railroad of freight-handling work on its piers in New York and Brooklyn. The board in this case declared the contract illegal and ordered that the employees suffering a reduction in wages under this contract should be reimbursed for their losses. The carrier was directed to reinstate all employees involved in this dispute, with seniority rights unimpaired, upon the application of the interested employees or their representatives.

Night Work.

THE discontinuance of the bonus hour to certain classes of employees engaged in night work—i. e., nine hours pay for eight hours work, which existed prior and during Federal control—is ordered on six western roads by decision No. 2071, dated January 3, 1924. To this decision are appended a dissenting opinion by a labor member and a supporting opinion by the chairman of the board.

Election of Employee Representatives.

Oregon-Washington Railroad & Navigation Co.

A DISPUTE arose between the Oregon-Washington Railroad & Navigation Co. and the Clerical Employees' Association and the Brotherhood of Railway and Steamship Clerks as to the right of certain supervisory employees to vote in an election to determine whether the clerical employees of the company should be represented by the Clerical Employees' Association, an association of company employees, or by the Brotherhood of Railway and Steamship Clerks. The board ruled in decision No. 2083 that since the Interstate Commerce Commission had not designated the classes of employees involved as officials they are covered by the transportation act, and the board is not authorized to exclude such employees from the application of the act. The general freight foremen and division fuel supervisors therefore, the board decided, should be permitted to participate in the ballot, and also the car distributors involved, provided they are not required to telegraph in the performance of their duties.

The claim of the Brotherhood of Railway and Steamship Clerks that the election conducted by the Oregon-Washington Railroad & Navigation Co. to determine who should represent the clerical employees was illegal and did not express the opinion of the majority, was upheld by the board in decision No. 2022, dated November 17, 1923.

The question as to whether the craft union or the company union should represent the employees arose again in the dispute between the American Train Dispatchers' Association and the Oregon-Washington Railroad & Navigation Co. In this case the train dispatchers' association contended that the carrier offered the individual train dispatchers an increase in pay and certain advantageous changes in working conditions on condition that they choose the company association to represent them instead of the union, and asked that the board require that the ballot submitted to the dispatchers be accompanied by an assurance that the conditions which the carrier promised should be given to the train dispatchers regardless of the result of the election. The board decided that it had no authority

to order either party to submit or refrain from submitting any proposal in conference. The labor members of the board dissented from this opinion. (Decision No. 2077, January 11, 1924.)

Great Northern Railroad.

In addendum No. 1 to decision No. 1947, issued December 11, 1923, the board directed that an election to determine who shall represent a class of employees shall be held as ordered even though one or more of the interested parties may decline to participate therein.

In this case there was a dispute between the Switchmen's Union and the Brotherhood of Railroad Trainmen as to which organization represented the yardmen on the Great Northern Railroad. The carrier declined to take any steps to help hold the election unless both organizations took part and contended that the controversy was entirely between the two organizations.

The switchmen's union was unable to get a satisfactory reply from the trainmen's organization and submitted the case to the Railroad Labor Board. In the opinion of the board the position of the carrier was fallacious. The carrier, the switchmen, trainmen, and any other organization entitled to represent the yardmen were ordered to confer on or before January 1, 1924, to arrange details of the proposed ballot.

If the representatives of any of the organizations comprising employees of this class decline to participate in the conference, the carrier and other representatives of employees of this class will proceed to hold the election as ordered. If the carrier declines to assist in holding the election, the representatives of yardmen who desire to participate in the election will arrange the details of the ballot and election, giving due notice to any other organization comprised of employees of this class of the date of the election, endeavoring to furnish ballots to all eligible voters, giving full publicity to the right of all eligible yardmen to cast their ballots, and taking all necessary precautions for a fair election and a correct and unquestioned count of the votes.

Such an election must be held in accordance with the procedure outlined by the board, however.

Atchison, Topeka, and Santa Fe Railway System.

The board declared illegal an election held by the Atchison, Topeka & Santa Fe Railway system, in which the American Train Dispatchers' Association refused to participate, and ordered that another election be held and the votes be tabulated for the system as a whole instead of by each operating division thereof as the carrier had conducted the election. (Decision No. 1990.)

Pennsylvania Railroad System.

Decisions Nos. 2079 and 2130 of the Railroad Labor Board, recently issued, set forth the details of a dispute between the Pennsylvania Railroad and the Order of Railroad Telegraphers, which in brief are as follows:

In June, 1921, the carrier distributed a ballot for election, under their employee representation plan, of representatives of the telegraphers. This ballot was protested by the telegraphers because it did not give them the right to vote for the Order of Railroad Telegraphers.

The employees were left no choice but to participate in the election and forfeit their right to vote for their organization. They knew that if they wrote the name of their organization on the ballots they would be thrown out by the carrier and not counted, and that a rump committee would be set up by the carrier to represent the employees, although such committee may have received but a small fraction of the eligible vote. This was what happened to the shop crafts under identical conditions, when approximately 10 per cent of the eligible vote was permitted to name the representatives of the shopmen by throwing out the ballots of all those who voted for the Federated Shop Crafts.⁴

The telegraphers therefore voted for the committeemen of their organization, but as individuals without organization designation. In every instance the local committee of the union was elected by an overwhelming majority. This committee of individuals represented the telegraphic employees in such conferences as occurred. In the rules dispute which led to decision No. 1233 it was agreed between the parties before proceeding with the hearing that the dispute was between the Pennsylvania Railroad System and its employees in the telegraphic department.

About January 1, 1923, another election was announced. The telegraphers again protested the form of ballot distributed by the carrier, and again elected the representatives of the Order of Railroad Telegraphers—the same committee in fact. After this second election the telegraphers sought to have the management recognize them as duly organized representatives of the Order of Railroad Telegraphers. The management refused and the Order of Railroad Telegraphers submitted the issue to the Railroad Labor Board for decision. The board held, in decision No. 2079, that the questions involved were within the jurisdiction of the board, but that the submission was improperly made—that the committee representing the employees must appear in the character and capacity in which they were elected, i. e., as an employees' committee and not as representatives of the Order of Railroad Telegraphers.

The employees therefore amended their submission and asked that the committee be allowed to present their contentions to the board as originally submitted.

The employees' position was as follows:

First. That both the elections of 1921 and 1923 were in contravention of the transportation act, 1920, and in violation of the right of the employees:

(a) Because the employees were deprived of any voice in the formulation of the plans for their own election;

(b) Because the carrier, the adversary with whom negotiations must be conducted, dictated the form and method of the representation of the employees;

(c) Because the carrier refused to place or permit on the ballots the name of the Order of Railroad Telegraphers, in which an overwhelming majority of the employees concerned hold membership; and

(d) Because the carrier arbitrarily excluded from participation in the election large numbers of employees rightfully entitled to vote therein.

Second. That the carrier is now putting out ballots and instructions for the holding of another election February 8, 1924, which is subject to all the foregoing objections urged against the said former elections and which has been planned and announced by the carrier without any conference or consultation with the employees' committee recognized by the carrier as the proper representatives of the employees, and all this notwithstanding the fact that material amendments have been made by the carrier to the rules and regulations under which its said former elections were held.

The carrier took the position:

First. That there is no dispute between the Order of Railroad Telegraphers and the carrier. This contention was sustained in decision No. 2079.

⁴ Decision No. 2130, Docket No. 3446, p. 3.

Second. That the committee of employees which submit the dispute herein were chosen in the elections of 1921 and 1923, and that they are therefore stopped from attacking the validity of said elections.

Third. That the election to be held February 8, 1924, is merely for the purpose of electing successors to those committeemen whose terms have expired in accordance with the plan under which the former elections were held.

Fourth. That there has been no conference between the carrier and employees as to the election to be held February 8, 1924, and no demand therefore, and consequently a dispute involving the matter can not be submitted to the board.

The opinion of the board states:

The carrier concedes that the committeemen so elected are the authorized representatives of the employees, but ingeniously insists that they can not attack the very elections in which they were chosen.

Under the facts and circumstances of this case, the carrier's contention is unsound and to sustain it would permit the carrier to profit by its own wrongful conduct and would close to the employees their only avenue of redress.

If the elections were illegally held—and they were—the employees have the right to raise and present the question through their representatives. The representatives of the employees are the committeemen who have made this submission to the board. They are contending, in substance and effect, that while they are the legal representatives of the employees, they would not be if the carrier had not excluded the name of the Order of Railroad Telegraphers from the ballots. They are alleging that the vast majority of the employees desired to vote for the Order of Railroad Telegraphers and were denied the right by the carrier, and that they, as the committee chosen to represent the employees, are voicing the will of said majority in bringing this dispute to the board. Certainly a protest of such a grave character, affecting the rights of such a large number of employees, can not be strangled by a technicality.

It is manifestly fallacious to say that the employees are estopped from attacking an election because of their participation in it, when such participation was to all intents and purposes compulsory.

As to the election to be held February 8, 1924, no conference and new dispute was necessary. It is merely another act of the carrier in a series of acts already involved in a pending submission, and the amended submission is a sufficient compliance with the statute.

The board decided that the elections of 1921 and 1923 and the proposed election of 1924 were in violation of the transportation act, and directed that an election be held by secret ballot in accordance with procedure outlined by the board in previous decisions, in which the employees will be given opportunity to vote for individuals or for their organization. In case the carrier refuses to participate in such an election the board authorizes the employees to conduct the election in accordance with procedure outlined by the board and to report the result to the carrier and to the board.

Kansas City Terminal Railway Co.

In decision No. 2019, dated November 9, 1923, the board decided that the majority of legal votes cast in an election determines who shall represent the employees. The carrier in this case, the Kansas City Terminal Railway Co., contended that a vote of at least 51 per cent of the total number of employees was necessary to determine an election; the organization, the Brotherhood of Railway and Steamship Clerks, held that a majority of legal votes cast should determine the issue.

Coverage of Trade-Union Agreement.

IN decision 1994, involving the Maine Central Railroad Co. and the Portland Terminal Co., the board restated the position taken in former decisions that employees of a class or craft come under the

terms of the agreements negotiated by the organization representing a majority of such craft or class, in this case, the Brotherhood of Station Employees, regardless of membership or nonmembership in the organization holding the agreement for the particular craft or class.

Violations of Board's Decisions.⁵

DECISIONS Nos. 2084, 2054, and 2074 declare that the Pennsylvania Railroad system and the Erie Railroad have violated the decisions of the Railroad Labor Board and are "knowingly and willfully persisting in such violation in contempt of the opinion expressed by the board and in contravention of the public welfare."

Bituminous Coal Industry—Interstate Agreement.

THE joint conference of operators and miners of Illinois, Indiana, Ohio, and western Pennsylvania, representing coal operators in the central bituminous field and the United Mine Workers of America, reaffirmed the existing contracts⁶ and extended their provisions both as to wages and conditions of work for a period of three years from April, 1924, to March 31, 1927. This settlement becomes the basis for contracts in outlying fields.

Fur Workers—New York City.

THE two-year contract between the International Fur Workers Union and the Associated Fur Manufacturers of New York City, which expired on January 31, 1924,⁷ has been renewed with certain important changes relating to wages, apprenticeship, contract work, unemployment, etc. The expiring contract provided for a committee to study and report on the question of apprenticeship. The new agreement makes the following provisions on this issue.

1. 10 per cent limitation per shop for a year.
2. None in shops of less than eight; one in each additional ten; in no case more than five to a shop.
3. Period, six months.
4. Minimum wages as follows: Apprentices drawn from trades other than the fur trade shall be paid not less than \$15 per week during the first two months of apprenticeship. After that period gradual increases to be granted the apprentice. The difference between the starting wage of the apprentice and the minimum scale of his particular branch and kind of work shall be fairly distributed during the balance of the apprenticeship period, in order to enable the apprentice to receive his full minimum wage at the completion of his apprenticeship. Apprentices drawn for the cutting and squaring branch from any of the three other branches of the trade or for any other branch as operating, wages shall be from \$25 per week during period of apprenticeship.
5. Proportionate increases during period of apprenticeship.
6. Committee on immediate action shall have supervision over employment of apprentices and shall in each case act so as to carry out the spirit of these regulations.

⁵ For other instances of violation, by carriers and by employees, see statement of the chairman of the board printed on pp. 61 to 64 of this issue of the MONTHLY LABOR REVIEW.

⁶ Agreement for 1923 was noted in the MONTHLY LABOR REVIEW for March, 1923, p. 56.

⁷ The terms of the expiring contract were noted in the MONTHLY LABOR REVIEW for March, 1922, p. 104.

7. In cases of shops employing more than two apprentices a committee shall distribute or apportion the remaining apprentices as far as possible in proportion to the different crafts in the shop.

8. The number of apprentices shall at all times be in proportion to the number of workers in the shops as provided in these regulations.

9. Provisions in regard to classes of workers as affecting wages applies to apprentices.

10. The question of apprentices in shops employing less than eight workers (six or seven) shall be under the jurisdiction of the committee on immediate action.

The weekly minimum wage scale was increased \$4 per week for all classes except second class finishers, who received a \$3 increase. The revised scale is as follows:

	Per week.
Cutters, first class	\$46
Cutters, second class	40
Operators, first class	38
Operators, second class	32
Operators, second class, females	32
Nailers, first class	36
Nailers, second class	30
Finishers, first class	35
Finishers, second class	28

The establishment of an unemployment fund is agreed upon in principle, and a committee is created to prepare a tentative plan for such a fund. Experts are to be engaged to work out the plan which is to be ready within one year. In the meantime claims by the union that an emergency affecting unemployment prevails in the industry will be referred to the conference committee to establish whether or not such emergency exists. Upon discovery of the existence of such an emergency, ways and means for mitigating these conditions are to be devised. In the consideration of and action on such a matter, the chairman of the conference committee is to act only in the capacity of mediator.

Members of the employers' association agree to give preference in the distribution of work to workers employed directly by them, but they may give work to outside contractors, provided such contractors employ at least five workers and have a union contract, the provisions of which are complied with. The names of contractors so employed must be filed with the conference committee. Penalties are provided in case of violations of these provisions.

Overtime work may be permitted between the second Monday of September and the fourth Monday of December.

Provisions for the division of work during slack periods could not be agreed upon and were left for decision by the impartial chairman of the conference committee.

Garment Industry—Cleveland.

Change in Unemployment Fund Rules.⁸

THE Board of Referees for the Cleveland Garment Industry decided on November 18, 1923, to reduce for the year 1924 the period of guaranteed employment from 41 to 40 weeks, with the provision that the unemployment allowance should be 50 per cent of the minimum wage instead of 66 $\frac{2}{3}$ per cent as heretofore. At the same

⁸ For statement of rules governing the plan see MONTHLY LABOR REVIEW, April, 1922, pp. 139, 140; August, 1922, pp. 135-138.

time employers were given more latitude in the matter of employing casual workers. Heretofore new employees passed through a two-weeks probationary period before acquiring the status of regular employees. In view of the general conditions obtaining throughout the industry the board decided that each employer should be permitted to employ for a period not exceeding four weeks, once in each of the two seasons, additional workers not to exceed 20 per cent of the workers in any one department. To take advantage of this provision, each employer must in each instance advise the union as to the date of the beginning of the period and as to the employment of individual workers.

To "facilitate the practical necessities of production," the board recommended that outside shops otherwise qualified to take work, but in arrears on account of payments to the unemployment fund, be listed as suspended shops. Any manufacturer may place work at such shops upon meeting his obligation to the unemployment fund.

In the opinion of the board, the Cleveland plan has met with marked success, due in large part to the cooperation of the workers and manufacturers. In a little over 10 months of the year 1923, only about one-twentieth of the reserve fund was actually paid out in unemployment benefits.

Retail Clerks—Butte, Mont.

AN agreement unusual in scope and content covering all classes of employees in the merchandising industry of Butte, Mont., became effective last October. It was signed by representatives of the Butte Clerks' Union and the Silver Bow Employers' Association, and includes 110 stores. The agreement follows in full:

(1) All persons employed by the members of the Silver Bow Employers' Association in the following work: Department managers, sales people, window trimmers, mail order departments, floor walkers, milliners, cashiers, bundle wrappers, street salesmen, collectors, advertising writers, warehousemen, receiving and shipping clerks, order counter employees, retail deliverymen and all employees not under the jurisdiction of other unions, excepting bookkeepers and stenographers who do such work exclusively, shall be members of the Butte Clerks' Union in good standing or shall become members of the said union within 30 days after securing employment.

(2) No person not eligible to membership in the clerks' union shall be employed at any time without written permission from the Butte Clerks' Union.

(3) The establishments shall be divided into two classes, viz: Textile stores and foodstuff stores.

(4) A foodstuff store shall be one which is engaged in the sale of foodstuffs.

(5) All stores not classified as foodstuff stores shall be considered textile stores.

HOURS.

(6) Eight hours of labor and one hour for lunch shall constitute a day's work in all textile stores.

(7) Nine hours for male members and eight hours for female members and one hour for lunch shall constitute a day's work in foodstuff stores.

(8) Any person employed for less than a day shall receive a full day's pay; in other words, any person who is allowed to report for duty on any day shall receive a full day's pay, except that overtime may be worked on Sundays and holidays.

(9) In foodstuff stores four hours shall be allowed, or its equivalent, for each week in which Monday forenoon closing is in effect in textile stores. Foodstuff establishments shall open for business not earlier than 8 o'clock a. m. and close at 6 p. m.

- (10) Exclusive hardware houses may open at 8.30 a. m. and close at 5.30 p. m.
- (11) Textile establishments shall open not earlier than 9 a. m. and close at 6 p. m., except that all textile stores shall open at 1 p. m. the first Monday after July 4, and continue to close every Monday forenoon and until 1 p. m. during the months of July and August. It is understood that if the clerks' union fails to enforce this half-holiday provision upon any store employing any of its members, after written notification through the Silver Bow Employers' Association, the particular group to which the store belongs shall be exempt from its provisions.

HOLIDAY CLOSING HOURS.

- (12) The closing hours before Christmas shall be as follows:
Foodstuff stores may remain open until 9 p. m. on the three working days prior to Christmas.
Wholesale houses, no additional time.
Textile houses may remain open until 9 p. m. on the six days prior to Christmas.
Work performed during this period to the time of closing shall not be construed to be overtime.

HOLIDAYS.

- (13) All establishments shall be closed all day as follows: All Sundays, Christmas Day, New Year's Day, Washington's Birthday, Decoration Day, Fourth of July, Commercial Day (third Wednesday in August), Labor Day, Columbus Day, and Thanksgiving Day. When any of the above holidays fall on Sunday the following Monday shall be observed.

- (14) Wholesale houses shall close at 1 p. m. on every Saturday. Work may start one hour earlier in these establishments on this day. All work after 1 p. m. shall be paid as overtime.

- (15) Members shall be paid for the above-mentioned holidays.

SCALES.

- (16) The scale of wages shall be as follows:
Textile employees, men, \$28.75 per week, or \$124.60 per month.
Textile employees, women, \$20 per week, \$86.65 per month.
Jewelers, watchmakers, engravers, opticians, \$36 per week.
Carpet layers, \$5 per day when employed less than one week.
Lady carpet sewers, \$25 per week.
Lady fitters in alteration departments, \$25 per week.
Delivery men, \$28.75 per week.
Delivery men (single wagon), \$16.45 per week, \$71.30 per month.
- (17) Foodstuff employees:
Men, \$31.65 per week, or \$137.15 per month.
Women, \$20 per week, or \$86.65 per month.
Delivery men, \$31.65 per week, or \$137.15 per month.
Delivery men (single wagon), \$18.10 per week, or \$78.45 per month.

OVERTIME.

- (18) All work in excess of the time specified as a day's work or on Sunday or holidays as specified shall be paid as overtime at the rate of 70 cents per hour for men and 50 cents for women and apprentices.

- (19) Watchmakers, jewelers, engravers, and opticians, \$1 per hour.

- (20) Carpet layers, 75 cents per hour.

- (21) Single drivers, 50 cents per hour.

- (22) Overtime due to the members of the said union shall be paid to the business agent of the said union.

APPRENTICES.

- (23a) One mechanical apprentice shall be permitted to each jewelry shop without the restrictions which apply to other apprentices.

- (23) One apprentice shall be allowed for each four members of the union. Any person 18 years of age starting an apprenticeship shall be paid the second year's apprentice scale; those 19 years, the third year's scale. Cash or errand boys or girls shall not be under the jurisdiction of the clerks' union.

- (24) All apprentices shall file application with the clerks' union and secure a working card before commencing employment, and after each year's employment shall be advanced to the next scale, if retained.

(25) WEEKLY AND MONTHLY WAGE SCALE FOR APPRENTICES, BY SEX.
Weekly scale.

Sex.	Age 17, first year.	Age 18, second year.	Age 19, third year.	Age 20.		
				Three and one- half years.	Fourth year.	Four and one- half years.
Girls.....	\$8.35	\$11.25	\$14.15	\$17.05	\$20.00	
Boys.....	8.35	13.45	18.55		23.65	\$28.75
Boys (foodstuff stores).....	8.35	14.15	19.95		25.75	31.65

Monthly scale.

Girls.....	\$36.20	\$48.75	\$61.30	\$73.90	\$86.65	
Boys.....	36.20	54.95	80.40		102.50	\$124.60
Boys (foodstuff stores).....	36.20	61.30	86.45		111.60	137.15

CIGAR AND FRUIT STORES.

(26) The closing hours shall not apply to such establishments, but the employees shall be under the jurisdiction of the said union and other rules apply.

WINDOW TRIMMERS.

(27) Window trimmers shall be allowed to trim windows after working hours, provided overtime is paid or the trimmer allowed the same time off the next day.

ALTERATION DEPARTMENT.

(28) No piecework shall be allowed in this department, or any work leased out. Any seamstress temporarily acting as a fitter shall receive fitter's wages. No apprentices shall be allowed in this department. Before commencing work in this department, new employees shall first secure a permit from the clerks' union.

GENERAL RULES.

(29) The business agent of the clerks' union shall be permitted to interview any employee during business hours, provided such employee is not engaged in waiting upon a customer. He shall also collect all dues, fees, fines, and assessments due from members of the said union, and all overtime due to the said members through the office of each establishment, but the office of the Silver Bow Employers' Association shall not be required to enforce the collection of dues, fines, and assessments.

(30) All misunderstandings or disagreements over the interpretation of this agreement shall be submitted to a joint committee for adjudication, the number of representatives on such committee to be mutually agreeable.

(31) This agreement shall be in full force and effect on and after the 16th day of October, 1923, and shall terminate on the 1st day of May, 1925; provided, that if neither party gives notice during the month of April, 1925, of a desire to change the provision, the agreement shall automatically remain in full force and effect for one year thereafter.

AGREEMENT BETWEEN SILVER BOW EMPLOYERS' ASSOCIATION AND THE BUTTE CLERKS' UNION, RELATIVE TO DRUGGISTS, AND THE MEMBERSHIP OF THE SAID UNION EMPLOYED THEREIN.

All persons employed in any store conducted by a member of the Silver Bow Employers' Association, except stenographers and bookkeepers who do such work exclusively, shall be or become members of the Butte Clerks' Union within 30 days from the commencement of said employment.

Nine hours' work, the hours to run consecutively with only one meal hour, where possible, shall constitute a day's work for all male employees.

On holidays specified by the agreement between the employers' association and the clerks' union, four and one-half hours shall constitute a day's work.

Every other Sunday shall be allowed off.

Forty-eight hours per week for girls employed as soda dispensers, cigar clerks, cashiers, etc., shall be considered union hours. All work in excess of this shall

be paid for at the rate of 50 cents per hour, in the manner prescribed by the general agreement with the employers' association. All work in excess of the prescribed work as above for male employees, shall be paid for at the rate of time and one-half in the manner provided by the general agreement.

The minimum wage for pharmacists registered in Montana shall be \$42.50 per week after six months' service in the State of Montana.

The first assistant for the first six month's service, \$28.90 per week; the second six month's service, \$31.50. After 12 month's service, said assistant to receive \$42.50 per week if registered in Montana.

The minimum wage for second assistant to be \$20 per week.

Any store may employ one additional clerk in addition to the first and second assistants under the terms of the general agreement.

Male soda dispensers to receive the minimum wage of \$26.25 per week.

All girl employees engaged as cashiers, cigar clerks, soda dispensers, etc., to receive the minimum wage of \$20 per week.

The first assistant is any person who is registered in some other State than Montana or a registered assistant in the State of Montana.

The second assistant is any person not registered in any State, but who is engaged in the sale or dispensing of drugs or drug sundries.

Not more than one first assistant is allowed to a store at one time. Only one second assistant shall be allowed to a store. However, one first and one second assistant may be allowed in one store at the same time.

The shifts shall rotate as to permit each member to enjoy the benefits of the early shift after having worked on the late night shift.

No employee shall suffer a reduction in salary on account of the operation of this agreement. This applies to all employees, who are allowed and earn commissions, bonuses, or other remuneration in addition to their salaries.

All conditions not specified by this agreement shall be governed by the general agreement between the clerks' union and the employers' association of which this agreement becomes a part.

This agreement shall be in full force and effect on and after the 16th day of October, 1923, and shall terminate on the first day of May, 1925; provided that if neither party gives notice during the month of April, 1925, of a desire to change the provisions, the agreement shall automatically remain in full force and effect for one year thereafter.

The Butte Clerks' Union recognizes the unfair competitive conditions at present prevailing in the foodstuff line and agrees to take effective steps to establish and maintain fair competitive conditions for the protection of their foodstuff employees and foodstuff stores observing union conditions.

Collective Agreement in Agriculture in Denmark.

IT WAS stated in Arbejdsgiveren (organ of the Danish Employers' Association, Copenhagen) for February 8, 1924 (p. 44), that the Land and Forest Owners Employers' Association had been carrying on negotiations with the Agricultural Workers' Union with a view to the extension of their collective agreement which was subject to notice of termination May 1. The agreement in force had been entered into April 23, 1922, and extended January 30, 1923, until 1924, with a supplementary agreement November 13, 1923, granting to certain agricultural workers a 10 per cent wage increase. This increase was not, however, included in contracts between the beet raisers and their workers.

On January 31 the parties agreed to an extension of the agreement until May 1, 1925, on the basis of the previous agreement, including the 10 per cent wage increase. At the same time minimum wage rates were agreed upon for tending and pulling sugar beets, sugar fodder beets, and turnips. The agreement has also been adopted by the two associations not affiliated with the Danish Employers' Association, namely, the Land and Forest Owners' Association in Maribo County and the Land and Forest Owners' Association in Langeland.

EMPLOYMENT AND UNEMPLOYMENT.

Employment in Selected Industries in February, 1924.

EMPLOYMENT in manufacturing industries in the United States increased 1.2 per cent in February—this being the first general increase since June, 1923—as shown by figures presented herewith by the United States Department of Labor through the Bureau of Labor Statistics. These unweighted figures are based on reports from 8,222 establishments in 52 industries, covering 2,693,636 employees whose total earnings during one week in February were \$72,552,483. The same establishments in January reported 2,661,233 employees and total pay rolls of \$67,970,982. Therefore, in addition to the increase in employment, there was an increase of 6.7 per cent in pay roll totals and an increase of 5.4 per cent in per capita earnings.

The end of the January inventory season accounts for a part of these increases, although the reports received show a decided and general upward tendency both in employment and in full-time and full-capacity operation.

Comparing data from identical establishments for January and February, increases in employment in February are shown in 35 of the 52 industries and increases in earnings in 45 industries.

Sugar refining, owing to a general resumption of work, led all the industries both in increased employment and increased earnings, the increases being over 40 per cent in each case. The stove industry gained 15 per cent in employment and 25 per cent in pay-roll totals. The stamped ware, carriage, dyeing and finishing textiles, women's clothing, iron and steel, and glass industries also show large increases in both items, while the fertilizer industry gained over 12 per cent in employment, and the automobile industry gained 25 per cent in pay-roll totals.

The rubber boot and shoe and the slaughtering and meat-packing industries show the greatest losses both in employment and earnings, although the losses were considerably smaller than the gains in other industries noted above.

Considering the industries by groups, increases are shown in every group both in employment and earnings with the exception of a very slight decrease in employment in the paper and printing group and a decrease of 1.2 per cent in pay-roll totals in the tobacco group. Stamped and enameled ware and the iron and steel and lumber groups made large gains both in employment and earnings, although the largest increase in earnings, 17 per cent, was in the vehicle group.

For convenient reference the latest figures available relating to all employees on Class I railroads, excluding executives and officials, drawn from Interstate Commerce reports, are given at the foot of the first and second tables.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN JANUARY AND FEBRUARY, 1924.

Industry.	Es- tab- lish- ments.	Number on pay roll.		Per cent of change.	Amount of pay roll.		Per cent of change.
		January, 1924.	February, 1924.		January, 1924.	February, 1924.	
Food and kindred products	377	181,394	182,357	+0.5	\$4,477,256	\$4,533,904	+1.3
Slaughtering and meat packing	86	94,133	90,354	-4.0	2,298,563	2,221,042	-3.4
Confectionery	126	17,085	16,827	-1.5	317,527	312,969	-1.4
Ice cream	56	3,642	3,664	+0.6	109,693	112,269	+2.3
Flour	287	15,309	15,441	+0.9	399,452	400,403	+0.2
Baking	309	43,737	45,519	+4.0	1,125,795	1,161,278	+3.2
Sugar refining, not including beet sugar	13	7,468	10,552	+41.3	226,226	325,943	+44.1
Textiles and their products	1,586	599,345	545,181	+1.1	10,842,906	11,149,786	+2.8
Cotton goods	293	181,863	181,200	-0.4	3,236,099	3,167,332	-2.1
Hosiery and knit goods	236	77,526	78,638	+1.4	1,290,552	1,359,322	+5.3
Silk goods	216	53,609	54,747	+2.1	1,078,112	1,155,797	+7.2
Woolen and worsted goods	184	70,457	70,289	-0.2	1,603,489	1,644,608	+2.6
Carpets	20	20,052	20,234	+0.9	524,202	506,992	-3.2
Dyeing and finishing textiles	75	26,671	28,224	+5.8	619,233	665,794	+7.5
Clothing, men's	209	55,774	57,521	+3.1	1,416,581	1,462,122	+3.2
Shirts and collars	97	24,806	24,521	-1.1	358,065	360,082	+0.7
Clothing, women's	177	16,133	17,027	+5.5	436,427	481,731	+10.4
Millinery and lace goods	79	12,454	12,780	+2.6	279,446	285,408	+2.1
Iron and steel and their products	1,420	555,320	569,026	+2.5	15,939,803	17,016,053	+6.8
Iron and steel	216	264,110	276,414	+4.7	7,794,020	8,619,428	+10.6
Structural ironwork	147	16,668	16,669	(1)	447,437	460,410	+2.9
Foundry and machine-shop products	624	169,950	163,278	-1.6	4,729,586	4,735,154	+0.1
Hardware	41	29,903	30,742	+2.8	730,050	750,796	+2.8
Machine tools	178	24,379	24,785	+1.7	702,417	720,391	+2.6
Steam fittings and steam and hot-water heating apparatus	130	39,663	40,361	+1.8	1,148,094	1,243,557	+8.3
Stoves	84	14,538	16,777	+15.4	388,199	486,315	+25.3
Lumber and its remanufactures	978	188,037	192,269	+2.3	3,947,596	4,222,682	+7.0
Lumber, sawmills	436	109,327	111,387	+1.9	2,162,092	2,301,537	+6.4
Lumber, millwork	225	30,471	31,387	+3.0	712,811	758,799	+6.5
Furniture	317	48,239	49,495	+2.6	1,072,683	1,162,346	+8.4
Leather and its finished products	340	121,197	121,780	+0.5	2,807,029	2,836,617	+1.1
Leather	128	26,736	26,857	+0.5	682,294	692,180	+1.4
Boots and shoes, not including rubber	212	94,461	94,923	+0.5	2,124,735	2,144,437	+0.9
Paper and printing	760	145,175	145,048	-0.1	4,418,035	4,456,012	+0.9
Paper and pulp	185	51,981	52,443	+0.9	1,350,210	1,408,005	+4.3
Paper boxes	154	19,018	18,980	-0.2	402,651	404,807	+0.5
Printing, book and job	238	30,855	30,456	-1.3	1,044,186	1,014,988	-2.8
Printing, newspapers	183	43,321	43,163	-0.4	1,620,988	1,628,212	+0.4
Chemicals and allied products	248	69,227	70,429	+1.7	1,999,361	2,056,666	+2.9
Chemicals	89	18,226	18,185	-0.2	480,808	487,369	+1.4
Fertilizers	110	7,829	8,814	+12.6	148,605	154,975	+4.3
Petroleum refining	49	43,172	43,430	+0.6	1,369,948	1,414,322	+3.2
Stone, clay, and glass products	603	94,098	95,150	+1.1	2,457,539	2,583,713	+5.1
Cement	73	23,215	22,975	-1.0	646,173	672,773	+4.1
Brick and tile	348	24,462	24,054	-1.7	606,277	612,350	+1.0
Pottery	51	12,176	12,305	+1.1	328,034	347,581	+6.0
Glass	131	34,245	35,816	+4.6	877,055	951,009	+8.4
Metal products other than iron and steel	42	13,051	14,163	+8.5	303,741	354,353	+16.7
Stamped and enameled ware	42	13,051	14,163	+8.5	303,741	354,353	+16.7
Tobacco manufactures	210	36,504	36,776	+0.7	676,390	669,610	-1.2
Tobacco: Chewing and smoking	33	3,942	4,092	+3.8	62,930	67,448	+7.2
Tobacco: Cigars and cigarettes	177	32,562	32,684	+0.4	613,460	601,162	-2.0
Vehicles for land transportation	783	499,954	502,308	+0.5	13,996,968	16,426,845	+17.4
Automobiles	225	326,369	333,425	+2.2	9,247,454	11,559,835	+25.0
Carriages and wagons	43	2,714	2,919	+7.6	64,723	73,801	+14.0
Car building and repairing, electric-railroad	184	16,534	16,106	-2.6	485,484	473,580	-2.5
Car building and repairing, steam-railroad	331	154,337	149,858	-2.9	4,199,307	4,319,629	+2.9
Miscellaneous industries	375	218,031	219,155	+0.5	6,105,088	6,247,240	+2.3
Agricultural implements	100	24,700	25,198	+2.0	666,069	688,763	+3.4
Electrical machinery, apparatus, and supplies	122	96,622	95,623	-1.0	2,716,390	2,727,955	+0.4
Pianos and organs	37	7,463	7,323	-1.9	209,597	213,846	+2.0
Rubber boots and shoes	10	18,709	17,863	-4.5	457,288	407,392	-10.9
Automobile tires	73	44,639	46,282	+3.7	1,334,169	1,433,416	+7.4
Shipbuilding, steel	33	25,898	26,866	+3.7	721,555	775,868	+7.5
Railroads, Class I	{ Nov. 15, 1923	1,883,081	1,777,325	-5.6	\$242,626,817	\$227,596,296	-6.2
	{ Dec. 15, 1923						

¹ Increase less than one-tenth of 1 per cent.

² Amount of pay roll for one month.

Comparison of Employment in February, 1924, and February, 1923.

REPORTS are available from 4,689 establishments in 43 industries for a comparison of employment and earnings between February, 1924, and February, 1923. These reports from identical establishments in each year show an increase in the 12-month interval of 221 employees, the numbers being 1,940,810 in 1924 and 1,940,589 in 1923. Total earnings and per capita earnings, however, both increased 8.6 per cent. There were gains in the number of employees in only 17 of the 43 industries, while 31 industries show an increase in pay-roll totals in 1924. The automobile industry led in increased employment in the year with 18 per cent and in pay-roll totals with a gain of 29 per cent. The pottery, electrical machinery, iron and steel, baking, and piano industries also show substantial gains in both items, while the carriage, automobile tire, steam-railroad car building and repairing, foundry, and shoe industries show considerable losses in both items. The fertilizer and leather industries each show losses in employment of about 11 per cent, but with slight changes in earnings.

Considering the industries by groups, the lumber, paper, food, stone, and iron and steel groups are shown to have gained in both employment and earnings during the 12-month period, while the chemical and stamped-ware groups gained in earnings alone. The leather group had 8.1 per cent fewer employees in February, 1924, than in the corresponding month of 1923, and earnings had fallen off 6.7 per cent. The textile group shows a loss of 4.7 per cent in employment with a decrease of 1.3 per cent in earnings.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN FEBRUARY, 1923, AND FEBRUARY, 1924.

Industry.	Es- tab- lish- ments.	Number on pay roll.		Per cent of change.	Amount of pay roll.		Per cent of change.
		February, 1923.	February, 1924.		February, 1923.	February, 1924.	
Food and Kindred Products	349	124, 179	126, 887	+2.2	\$2, 856, 808	\$3, 188, 411	+11.6
Slaughtering and meat packing.....	82	88, 701	89, 460	+0.9	1, 972, 191	2, 198, 052	+11.5
Flour.....	90	7, 628	7, 696	+0.9	187, 399	202, 288	+7.9
Baking.....	177	27, 850	29, 731	+6.8	697, 218	788, 071	+13.0
Textiles and their products	1, 075	428, 648	408, 561	-4.7	8, 568, 563	8, 458, 426	-1.3
Cotton goods.....	221	154, 423	145, 147	-6.0	2, 601, 457	2, 517, 927	-3.2
Hosiery and knit goods.....	141	48, 384	47, 554	-1.7	836, 521	862, 943	+3.2
Silk goods.....	110	37, 192	36, 048	-3.1	747, 883	773, 122	+3.4
Woolen and worsted goods.....	151	60, 508	57, 004	-5.8	1, 352, 875	1, 346, 573	-0.5
Carpets.....	19	16, 075	16, 402	+2.0	417, 012	455, 744	+9.3
Dyeing and finishing textiles.....	30	17, 385	16, 152	-7.1	395, 159	375, 620	-4.9
Clothing, men's.....	156	49, 421	47, 775	-3.3	1, 326, 286	1, 266, 213	-4.5
Shirts and collars.....	84	25, 376	23, 089	-9.0	366, 718	338, 385	-7.7
Clothing, women's.....	119	13, 203	12, 835	-2.8	386, 229	372, 419	-3.6
Millinery and lace goods.....	44	6, 681	6, 555	-1.9	138, 423	149, 480	+8.0
Iron and steel and their products	489	368, 840	367, 512	+0.2	10, 308, 269	11, 110, 820	+7.8
Iron and steel.....	170	227, 598	243, 798	+7.1	6, 485, 224	7, 550, 488	+16.4
Foundry and machine-shop products.....	224	106, 154	90, 408	-14.8	3, 018, 965	2, 663, 014	-11.8
Hardware.....	29	20, 180	20, 636	+2.3	461, 159	523, 107	+13.4
Stoves.....	66	12, 908	12, 670	-1.8	342, 921	374, 211	+9.1
Lumber and its remanufactures	554	115, 411	118, 044	+2.3	2, 354, 737	2, 683, 593	+13.1
Lumber, sawmills.....	219	62, 304	64, 336	+3.3	1, 142, 381	1, 336, 216	+17.0
Lumber, millwork.....	173	23, 924	24, 941	+4.3	551, 562	623, 872	+13.1
Furniture.....	162	29, 183	28, 767	-1.4	660, 794	703, 505	+6.5
Leather and its finished products	281	118, 118	108, 708	-8.1	2, 663, 949	2, 456, 760	-6.7
Leather.....	122	28, 674	25, 676	-10.5	680, 039	663, 243	-2.5
Boots and shoes, not including rubber.....	159	87, 444	81, 032	-7.3	1, 983, 910	1, 823, 517	-8.1
Paper and printing	590	120, 091	122, 863	+2.3	3, 474, 721	3, 777, 324	+8.7
Paper and pulp.....	176	50, 095	49, 780	-0.6	1, 241, 687	1, 337, 721	+7.7
Paper boxes.....	138	14, 464	14, 839	+2.6	283, 284	307, 297	+8.5
Printing, book and job.....	116	20, 291	20, 774	+2.4	674, 883	713, 541	+5.7
Printing, newspapers.....	160	35, 241	37, 470	+6.3	1, 274, 867	1, 418, 765	+11.3
Chemicals and allied products	221	62, 270	59, 134	-5.0	1, 677, 243	1, 723, 039	+2.7
Chemicals.....	78	14, 932	14, 954	+0.1	360, 264	396, 662	+10.1
Fertilizers.....	104	9, 393	8, 342	-11.2	143, 415	146, 455	+2.1
Petroleum refining.....	39	37, 945	35, 838	-5.6	1, 173, 564	1, 179, 922	+0.5
Stone, clay, and glass products	333	53, 105	54, 272	+2.2	1, 263, 713	1, 483, 036	+17.4
Brick and tile.....	201	14, 748	15, 169	+2.9	336, 959	403, 589	+19.8
Pottery.....	47	10, 704	11, 946	+11.6	268, 340	337, 809	+25.9
Glass.....	85	27, 653	27, 157	-1.8	658, 414	741, 638	+12.6
Metal products, other than iron and steel	29	11, 263	10, 665	-5.3	252, 110	278, 449	+10.4
Stamped and enameled ware.....	29	11, 263	10, 665	-5.3	252, 110	278, 449	+10.4
Tobacco manufactures	160	31, 657	31, 257	-1.3	556, 143	570, 367	+2.6
Tobacco: Chewing and smoking.....	12	1, 923	1, 878	-2.3	30, 745	33, 262	+8.2
Tobacco: Cigars and cigarettes.....	148	29, 734	29, 379	-1.2	525, 403	537, 105	+2.2
Vehicles for land transportation	346	351, 834	379, 771	+7.9	10, 871, 804	12, 787, 690	+19.6
Automobiles.....	178	250, 320	294, 374	+17.6	7, 937, 176	10, 268, 552	+29.4
Carriages and wagons.....	32	2, 511	2, 078	-17.2	56, 718	52, 067	-8.2
Car building and repairing, steam-railroad.....	136	99, 003	83, 319	-15.8	2, 677, 910	2, 447, 071	-8.6
Miscellaneous industries	262	159, 173	155, 136	-2.5	4, 172, 477	4, 520, 556	+8.3
Agricultural implements.....	57	22, 067	20, 031	-9.3	552, 241	566, 617	+2.6
Electrical machinery, apparatus, and supplies.....	94	69, 960	76, 539	+9.4	1, 731, 902	2, 185, 051	+26.2
Pianos and organs.....	24	5, 830	6, 168	+5.8	151, 736	181, 951	+19.9
Automobile tires.....	63	46, 260	38, 741	-16.3	1, 343, 720	1, 190, 167	-11.4
Shipbuilding, steel.....	24	15, 036	13, 657	-9.2	392, 878	396, 770	+1.0
Railroads, Class I { Dec. 15, 1922.....		1, 772, 553			\$240, 964, 277		
Dec. 15, 1923.....		1, 777, 325		+0.3	\$227, 595, 296		-5.5

¹ Amount of pay roll for one month.

Per Capita Earnings.

PER CAPITA earnings increased in February as compared with January in 44 of the 52 industries here considered. The automobile industry, owing to a large increase in full-time operation, shows a gain of over 22 per cent in per capita earnings, and the stove industry follows with an increase of 8.6 per cent. The only decreases of considerable size were in the fertilizer and rubber-boot industries, and these were 7.4 per cent and 6.7 per cent, respectively.

Comparing per capita earnings in February, 1924, with those in February, 1923, increases are shown in 40 of the 43 industries for which data are available. The largest increases were 16.7 per cent in the stamped-ware industry, 16.5 per cent in the brick and tile industry, and 15 per cent each in the electrical machinery and fertilizer industries.

COMPARISON OF PER CAPITA EARNINGS: FEBRUARY, 1924, WITH JANUARY, 1924, AND JANUARY, 1923.

Industry.	Per cent of change, February, 1924, compared with—		Industry.	Per cent of change, February, 1924, compared with—	
	January, 1924.	February, 1923.		January, 1924.	February, 1923.
Automobiles.....	+22.4	+10.0	Shirts and collars.....	+1.9	+1.5
Stoves.....	+8.6	+11.2	Foundry and machine-shop products.....	+1.8	+3.6
Stamped and enameled ware.....	+7.5	+16.7	Ice cream.....	+1.7	—
Carpets.....	+7.2	+7.1	Chemicals.....	+1.6	+9.9
Steam fittings, etc. ¹	+6.4	—	Dyeing and finishing textiles.....	+1.6	+2.3
Carriages and wagons.....	+6.0	+10.9	Electrical machinery, apparatus, and supplies.....	+1.5	+15.3
Car building and repairing, steam-railroad.....	+5.9	+8.6	Agricultural implements.....	+1.3	+13.2
Iron and steel.....	+5.7	+8.7	Leather.....	+1.0	+8.9
Furniture.....	+5.6	+8.0	Machine tools.....	+0.9	—
Cement.....	+5.2	—	Paper boxes.....	+0.8	+5.7
Silk goods.....	+5.0	+6.6	Printing, newspapers.....	+0.8	+1.6
Pottery.....	+4.9	+12.8	Slaughtering and meat packing.....	+0.7	+10.5
Clothing, women's.....	+4.6	—0.8	Boots and shoes, not including rubber.....	+0.4	—0.8
Lumber, sawmills.....	+4.4	+13.2	Car building and repairing, electric-railroad.....	+0.1	—
Pianos and organs.....	+4.0	+13.3	Clothing, men's.....	+0.1	+1.3
Hosiery and knit goods.....	+3.9	+5.0	Confectionery.....	+0.1	—
Glass.....	+3.7	+14.7	Hardware.....	(²)	+10.9
Shipbuilding, steel.....	+3.7	+11.2	Millinery and lace goods.....	—0.5	+10.0
Automobile tires.....	+3.6	+5.7	Flour.....	—0.6	+7.0
Lumber, millwork.....	+3.4	+8.5	Baking.....	—0.9	+5.9
Paper and pulp.....	+3.3	+8.4	Printing, book and job.....	—1.5	+3.3
Tobacco: Chewing and smoking.....	+3.3	+10.8	Cotton goods.....	—1.7	+3.0
Structural ironwork.....	+2.9	—	Tobacco: Cigars and cigarettes.....	—2.4	+8.5
Woolen and worsted goods.....	+2.8	+5.6	Rubber boots and shoes.....	—6.7	—
Brick and tile.....	+2.7	+16.5	Fertilizers.....	—7.4	+15.0
Petroleum refining.....	+2.6	+6.4			
Sugar refining, not including beet sugar.....	+2.0	—			

¹ And steam and hot-water heating apparatus.² Increase of less than one-tenth of 1 per cent.

Full-time and Part-time Operation.

A TOTAL of 6,879 establishments in the 52 industries reported as to their operating time in February. Of these, 75 per cent were on a full-time schedule, 22 per cent on a part-time schedule, and 3 per cent were idle. This is an increase of 6 per cent in full-time operation as compared with the report for January, and, while

it affected three-fourths of the 52 industries, it was most pronounced in seasonal industries (such as clothing, automobiles, and fertilizers), in the iron and steel group of industries, and in the pottery, glass, silk, and carpet industries.

Of the establishments working full-time, 49 per cent also reported full-capacity operation, 32 per cent reported part-capacity operation, and 19 per cent failed to report as to capacity operation. This represents an increase as compared with January of 2 per cent in the proportion of establishments reporting full-capacity operation.

FULL AND PART TIME OPERATION IN MANUFACTURING ESTABLISHMENTS IN
FEBRUARY, 1924.

Industry.	Establishments reporting.				Industry.	Establishments reporting.			
	Total.	Per cent operating full time.	Per cent operating part time.	Per cent idle.		Total.	Per cent operating full time.	Per cent operating part time.	Per cent idle.
Food and kindred products:					Paper and printing:				
Slaughtering and meat packing.....	65	91	8	1	Paper and pulp.....	144	66	29	5
Confectionery.....	101	69	29	2	Paper boxes.....	125	73	27	---
Ice cream.....	43	86	9	5	Printing, book and job.....	205	93	7	---
Flour.....	248	36	63	2	Printing, newspapers.....	138	100	---	---
Baking.....	258	91	9	---	Chemicals and allied products:				
Sugar refining, not including beet sugar.....	9	78	11	11	Chemicals.....	64	85	11	3
Textiles and their products:					Fertilizers.....	103	46	50	5
Cotton goods.....	279	70	29	1	Petroleum refining.....	42	83	17	---
Hosiery and knit goods.....	174	71	27	2	Stone clay and glass products:				
Silk goods.....	184	71	29	---	Cement.....	50	76	18	6
Woolen and worsted goods.....	164	76	24	---	Brick and tile.....	282	59	22	19
Carpets.....	15	87	13	---	Pottery.....	48	98	2	---
Dyeing and finishing textiles.....	70	70	30	---	Glass.....	116	82	15	3
Clothing, men's.....	151	74	25	1	Metal products other than iron and steel:				
Shirts and collars.....	61	82	15	3	Stamped and enameled ware.....	31	81	19	---
Clothing, women's.....	111	84	12	5	Tobacco manufactures:				
Millinery and lace goods.....	61	77	20	3	Tobacco, chewing and smoking.....	33	76	21	3
Iron and steel and their products:					Tobacco, cigars and cigarettes.....	124	60	35	5
Iron and steel.....	187	62	29	9	Vehicles for land transportation:				
Structural ironwork.....	130	82	18	---	Automobiles.....	193	80	17	3
Foundry and machine-shop products.....	545	76	23	(1)	Carriages and wagons.....	39	64	36	---
Hardware.....	40	80	20	---	Car building and repairing, electric-railroad.....	164	95	5	---
Machine tools.....	162	86	12	1	Car building and repairing, steam-railroad.....	290	66	33	1
Steam fittings and steam and hot-water heating apparatus.....	122	86	12	2	Miscellaneous industries:				
Stoves.....	80	66	30	4	Agricultural implements.....	88	74	22	4
Lumber and its remanufactures:					Electrical machinery, apparatus, and supplies.....	101	91	9	---
Lumber, sawmills.....	399	74	20	6	Pianos and organs.....	28	96	4	---
Lumber, millwork.....	185	83	15	2	Rubber boots and shoes.....	5	20	80	---
Furniture.....	265	82	17	1	Automobile tires.....	59	59	37	3
Leather and its finished products:					Shipbuilding, steel.....	27	96	4	---
Leather.....	97	81	15	3					
Boots and shoes, not including rubber.....	174	72	26	1					

¹ Less than one-half of 1 per cent.

The following table shows in detail the full-time reports of one-half the industries:

Industry.	Establishments operating full-time.				Industry.	Establishments operating full-time.			
	And full capacity.	And part capacity.	And not reporting as to capacity operation.	Total.		And full capacity.	And part capacity.	And not reporting as to capacity operation.	Total.
Flour.....	43	31	15	89	Paper and pulp.....	73	9	13	95
Cotton goods.....	126	32	37	195	Paper boxes.....	43	31	17	91
Hosiery and knit goods.....	69	39	16	124	Book and job printing.....	79	61	50	190
Silk goods.....	49	75	7	131	Fertilizers.....	12	28	7	47
Woolen and worsted goods.....	74	56	5	125	Cement.....	28	8	2	38
Men's clothing.....	57	33	22	112	Brick and tile.....	105	37	24	166
Women's clothing.....	44	17	32	93	Pottery.....	25	14	8	47
Iron and steel.....	44	49	23	116	Glass.....	38	34	23	95
Foundry and machine-shop products.....	155	201	60	416	Cigars and cigarettes.....	26	27	21	74
Machine tools.....	26	86	28	140	Automobiles.....	78	43	34	155
Lumber, sawmills.....	227	30	40	297	Steam-railroad ca. building and repairing.....	116	42	34	192
Furniture.....	119	55	44	218	Agricultural implements.....	14	26	25	65
Leather.....	21	39	19	79	Electrical machinery, apparatus, and supplies.....	31	31	30	92
Boots and shoes.....	48	56	22	126					

Wage Changes.

DURING the month ending February 15, wage-rate increases were reported by 45 establishments in 21 of the 52 industries, while decreases in wage rates were reported by 14 establishments in 12 industries. These changes all affected relatively small numbers of employees and indicate no general trend. Both increases and decreases in rates averaged 10 per cent, the increases affecting 29 per cent of the employees in the establishments concerned, while the decreases affected 45 per cent of the employees in the establishments concerned. The combined total of all employees affected, 10,090, is 0.4 per cent only of the total number of employees in February in all establishments reporting in the 52 industries.

WAGE ADJUSTMENT OCCURRING BETWEEN JANUARY 15 AND FEBRUARY 15, 1924.

Industry. ¹	Establishments.		Amount of increase.		Employees affected.		
	Total number reporting.	Number reporting increases.	Range.	Average.	Total number.	Per cent of employees.	
						In establishments reporting increases.	In all establishments reporting.
Food and kindred products:			<i>Per cent.</i>	<i>Per cent.</i>			
Slaughtering and meat packing.....	86	1	6	6.0	143	8	(²)
Flour.....	287	1	10	10.0	19	100	(²)
Baking.....	309	1	10	10.0	12	100	(²)
Textiles and their products:							
Cotton goods.....	293	(³)					
Silk goods.....	216	⁴ 1	10	10.0	174	100	(²)
Dyeing and finishing textiles.....	75	(⁵)					
Clothing, women's.....	177	1	10-20	15.0	50	94	(²)
Millinery and lace goods.....	79	1	8	8.0	6	35	(²)
Iron and steel and their products:							
Iron and steel.....	216	1	14.6	14.6	1,501	31	1
Foundry and machine-shop products.....	624	6	2.5-10	6.0	397	13	(⁶)
Machine tools.....	178	2	5-7	5.6	20	47	(²)
Stoves.....	84	4	7.9-25	8.5	929	64	6
Lumber and its remanufactures:							
Lumber, sawmills.....	436	⁶ 3	2-20	3.0	106	13	(²)
Lumber, millwork.....	225	⁷ 1	10	10.0	55	46	(²)
Furniture.....	317	3	1-9	5.4	37	10	(²)
Leather and its finished products:							
Leather.....	128	⁸ 1	10	10.0	5	25	(²)
Boots and shoes, not including rubber.....	212	(⁹)					
Paper and printing:							
Printing, book and job.....	238	7	5-20	5.6	210	37	1
Printing, newspapers.....	183	5	3.6-12.1	6.4	461	42	1
Chemicals and allied products:							
Fertilizers.....	110	¹⁰ 1	25	25.0	120	94	1
Stone, clay, and glass products:							
Glass.....	131	1	20	20.0	50	23	(⁷)
Tobacco manufactures:							
Tobacco: Chewing and smoking.....	33	1	8	8.0	19	38	(⁷)
Vehicles for land transportation:							
Automobiles.....	225	(¹¹)					
Carriages and wagons.....	43	1	10	10.0	8	100	(²)
Car building and repairing, steam-rail-road.....	331	(¹²)					
Miscellaneous industries:							
Agricultural implements.....	100	(¹³)					
Electrical machinery, apparatus, and supplies.....	122	2	5-10	8.6	95	30	(⁷)
Automobile tires.....	73	(¹⁴)					

¹ The 24 industries for which no wage changes were reported are omitted from this table.

² Less than one-half of 1 per cent.

³ One establishment decreased the rates of its 554 employees 10 per cent.

⁴ Also, one establishment decreased the rates of 62 of its 133 employees 2 per cent.

⁵ One establishment decreased the rates of 60 of its 116 employees 10 per cent.

⁶ Also, one establishment decreased the rates of 438 of its 487 employees 10 per cent.

⁷ Also, one establishment decreased the rates of its 25 employees 20 per cent.

⁸ Also, one establishment decreased the rates of its 300 employees 10 per cent.

⁹ Two establishments decreased the rates of their 222 employees 16 per cent.

¹⁰ Also, one establishment decreased the rates of 48 of its 90 employees 12.5 per cent.

¹¹ One establishment decreased the rates of 1,500 of its 5,540 employees 10 per cent.

¹² One establishment decreased the rates of 1,829 of its 5,153 employees 10 per cent.

¹³ Two establishments decreased the rates of 608 of their 674 employees 10 per cent.

¹⁴ One establishment decreased the rates of 27 of its 179 employees 6 per cent.

Index of Employment in Manufacturing Industries.

THE Bureau of Labor Statistics has published monthly volume of employment reports for various manufacturing industries since November, 1915, beginning with 13 industries, which were continued to July, 1922, when 29 additional industries were incorporated in the monthly report. The number of industries was gradually increased during the succeeding 11 months until in June, 1923, the total had reached 52, which number of industries has been continued to date. Confectionery and ice cream were carried as one industry from April to October, 1923, but since November they have appeared as separate industries, and their totals have been separated for the seven earlier months for which combined totals were published. During the period November, 1915, to June, 1922, the report each month included from 234 to 690 establishments in 13 industries, while the enlarged series began in July, 1922, with 2,595 establishments in 42 industries and the current February report is for 8,222 establishments in 52 industries.

The Bureau of Labor Statistics is herewith presenting an index of employment for each of the 52 industries now embraced in this monthly report, for as much of the period July, 1922, to February, 1924, as there are data available in each industry, together with 12 group indexes and a general index, each of which is an average of the weighted relatives of the separate industries included therein. For this purpose the monthly average of the year 1923 is used as the base, or 100 per cent.

This base was selected for two reasons, first, the average of employment during the months of 1923 was neither extremely high nor extremely low, and, second, the bureau's representation in each industry had reached a comparatively satisfactory status. The bureau's aim has been to secure in each industry a sufficiently large number of reporting establishments to guarantee for each report approximately 40 per cent of the employees in the industry in each State in 1919 as recorded by the Census of Manufactures. The consummation of this design brings the geographical distribution of employees in the several industries reported to an equitable basis.

It is understood, of course, that this study is designed primarily to show conditions in industries which are of the greatest importance to the United States as a whole. It therefore does not necessarily reflect fully all changes in total employment in every section of the country, owing to the fact that some purely local industries of great weight to their respective communities may in the aggregate of employment in the United States fall below the total which is considered necessary to bring an industry into this study.

The weights used in combining the various index numbers for individual industries into the 12 group indexes and into the final general index represent the number of wage earners in the respective industries in 1919.

INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES.

[Monthly average, 1923=100.]

Month and year.	General index.	Food and kindred products.							Textiles and their products.	
		Group index.	Slaughtering and meat packing.	Confectionery.	Ice cream.	Flour.	Baking.	Sugar refining (cane).	Group index.	Cotton goods.
1922.										
July.....	87	89	88	-----	-----	92	-----	-----	90	84
August.....	88	90	87	-----	-----	99	-----	-----	92	88
September.....	91	92	88	-----	-----	107	93	-----	95	92
October.....	93	94	90	-----	-----	108	94	-----	97	96
November.....	94	97	95	-----	-----	110	95	-----	98	102
December.....	97	98	100	-----	-----	107	93	-----	100	104
1923.										
January.....	98	98	99	-----	-----	99	91	-----	102	105
February.....	100	95	95	-----	-----	98	95	-----	104	105
March.....	102	98	93	-----	-----	98	98	-----	105	106
April.....	102	95	93	91	78	96	97	120	104	106
May.....	102	96	96	87	100	94	97	117	103	106
June.....	102	99	99	89	116	93	101	111	101	104
July.....	100	100	101	86	118	95	106	104	98	96
August.....	100	102	102	93	111	107	104	91	97	94
September.....	100	105	103	110	104	107	104	94	98	95
October.....	99	107	104	121	95	108	106	96	96	92
November.....	99	106	107	120	89	104	101	95	95	94
December.....	97	102	108	104	88	100	100	71	96	96
1924.										
January.....	95	98	105	90	86	98	98	73	96	93
February.....	97	99	101	89	87	99	102	104	97	93

Textiles and their products—Concluded.

Month and year.	Hosiery and knit goods.	Silk goods.	Woolen and worsted goods.	Carpets.	Dyeing and finishing textiles.	Clothing, men's.	Shirts and collars.	Clothing, women's.	Millinery and lace goods.
1922.									
July.....	96	90	76	94	86	104	100	97	86
August.....	100	91	77	94	87	99	98	104	94
September.....	97	91	86	95	97	99	98	104	98
October.....	99	93	90	97	101	98	97	104	100
November.....	99	97	95	99	104	96	99	95	95
December.....	100	99	97	100	107	101	101	93	100
1923.									
January.....	100	99	99	101	106	102	102	103	104
February.....	101	101	100	99	105	105	103	108	108
March.....	103	102	101	100	106	107	104	111	110
April.....	103	103	102	100	106	100	104	107	108
May.....	103	102	102	100	105	99	102	100	103
June.....	102	101	102	100	101	101	100	93	97
July.....	98	99	100	101	101	101	99	97	97
August.....	98	100	99	100	95	101	94	98	99
September.....	97	99	98	100	97	100	96	102	99
October.....	98	99	98	99	92	97	99	100	96
November.....	99	98	99	100	92	93	99	92	89
December.....	98	98	99	99	94	94	98	89	91
1924.									
January.....	98	97	97	99	84	99	96	98	93
February.....	99	99	97	100	89	102	95	104	95

INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES—Continued.

Month and year.	Iron and steel and their products.							Lumber and its remanufactures.	
	Group index.	Iron and steel.	Structural iron-work.	Foundry and machine-shop products.	Hardware.	Machine tools.	Steam-fittings and steam and hot-water heating apparatus.	Stoves.	Lumber, saw-mills.
1922.									
July.....	79	87	-----	72	86	-----	-----	87	97
August.....	79	86	-----	72	88	-----	-----	95	97
September.....	83	85	-----	79	89	-----	-----	104	98
October.....	86	89	-----	83	91	-----	-----	103	96
November.....	89	91	-----	87	94	-----	-----	106	96
December.....	93	93	-----	91	97	-----	-----	106	95
1923.									
January.....	94	95	-----	93	98	-----	-----	101	94
February.....	97	97	-----	97	99	-----	-----	103	96
March.....	100	99	-----	100	101	-----	-----	105	97
April.....	101	99	-----	102	103	-----	-----	104	100
May.....	102	101	95	103	101	110	103	103	101
June.....	104	104	100	104	101	109	103	103	102
July.....	102	101	98	104	102	106	102	94	103
August.....	102	103	104	104	102	82	102	95	102
September.....	102	102	104	102	100	101	101	98	103
October.....	100	102	102	99	100	100	100	99	101
November.....	98	100	100	97	97	96	96	99	101
December.....	94	96	97	93	97	96	93	95	98
1924.									
January.....	93	99	95	89	98	92	95	80	95
February.....	94	104	95	87	100	94	96	93	97
Lumber and its remanufactures—Concluded.									
Month and year.	Lumber and its remanufactures—Concluded.		Leather and its finished products.			Paper and printing.			
	Lumber, mill-work.	Furniture.	Group index.	Leather.	Boots and shoes, not including rubber.	Group index.	Paper and pulp.	Paper boxes.	Printing, book and job.
1922.									
July.....	97	88	94	95	94	93	90	85	97
August.....	99	90	97	98	97	93	90	88	95
September.....	95	91	98	100	98	94	91	91	97
October.....	95	94	98	100	98	95	95	94	96
November.....	96	97	100	103	99	98	96	97	95
December.....	95	100	101	103	101	99	97	98	100
1923.									
January.....	95	99	104	105	104	98	96	94	100
February.....	96	101	105	106	105	98	97	94	100
March.....	99	101	105	106	105	100	102	98	101
April.....	101	101	103	104	103	100	104	97	100
May.....	101	100	100	100	100	100	103	97	98
June.....	103	99	97	99	97	100	104	98	99
July.....	103	99	98	99	95	100	101	100	98
August.....	103	100	99	97	99	100	102	101	98
September.....	100	99	98	96	99	100	99	103	100
October.....	99	100	98	96	98	101	98	106	100
November.....	99	101	98	97	98	102	97	107	102
December.....	100	99	98	94	97	102	98	104	103
1924.									
January.....	98	96	97	95	97	102	97	100	104
February.....	101	99	97	95	97	101	97	100	103

INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES—Continued.

Month and year.	Chemicals and allied products.				Stone, clay, and glass products.				
	Group index.	Chemicals.	Fertilizers.	Petroleum refining.	Group index.	Cement.	Brick and tile.	Pottery.	Glass.
1922.									
July.....	88	84	94	90	99	-----	102	116	91
August.....	92	87	109	90	100	-----	102	120	90
September.....	92	89	108	90	100	-----	100	122	91
October.....	93	93	101	90	95	-----	99	84	96
November.....	96	96	99	94	92	-----	96	52	102
December.....	95	97	87	95	92	-----	91	67	102
1923.									
January.....	98	100	97	95	92	-----	84	92	108
February.....	102	102	114	96	93	-----	84	95	100
March.....	105	103	130	98	96	-----	91	96	102
April.....	104	99	121	103	101	95	102	97	102
May.....	102	102	89	107	104	98	106	99	103
June.....	99	101	77	106	105	99	108	101	106
July.....	98	98	83	105	103	102	109	97	96
August.....	99	98	90	104	102	101	109	104	99
September.....	100	98	102	101	102	102	108	104	95
October.....	99	99	103	98	101	101	104	105	95
November.....	98	100	99	96	100	102	100	104	97
December.....	97	101	96	93	98	101	95	105	98
1924.									
January.....	97	100	97	92	94	98	89	106	92
February.....	99	99	110	93	95	98	88	107	96

Month and year.	Metal products other than iron and steel.		Tobacco manufactures.			Vehicles for land transportation.				
	Group index.	Stamped and enameled ware.	Group index.	Tobacco, chewing and smoking.	Tobacco, cigars and cigarettes.	Group index.	Automobiles.	Carrriages and wagons.	Car building and repairing, electric railroad.	Car building and repairing, steam railroad.
1922.										
July.....	66	66	106	110	105	77	87	97	-----	70
August.....	86	86	104	104	104	75	87	99	-----	67
September.....	89	89	106	110	106	81	87	97	-----	77
October.....	93	93	108	108	108	86	82	96	-----	88
November.....	101	101	107	106	107	90	81	94	-----	95
December.....	99	99	106	100	107	93	83	97	-----	99
1923.										
January.....	105	105	103	103	103	96	87	100	-----	101
February.....	107	107	102	103	102	97	94	104	-----	98
March.....	111	111	103	96	104	100	99	107	-----	100
April.....	109	109	100	96	100	100	103	113	-----	98
May.....	107	107	100	102	100	101	104	112	-----	99
June.....	103	103	100	102	100	103	104	109	94	102
July.....	101	101	98	104	97	101	101	102	99	101
August.....	93	93	94	98	94	102	100	100	101	103
September.....	92	92	99	99	99	101	101	93	103	102
October.....	92	92	100	102	100	102	102	86	102	102
November.....	89	89	101	101	101	101	103	87	102	100
December.....	92	92	100	96	101	97	102	88	100	94
1924.										
January.....	94	94	96	104	95	96	107	81	92	89
February.....	102	102	97	108	96	96	110	87	90	87

INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES—Concluded.

Month and year.	Miscellaneous industries.						
	Group index.	Agricultural implements.	Electrical machinery, apparatus, and supplies.	Pianos and organs.	Rubber boots and shoes.	Automobile tires.	Ship-building, steel.
1922.							
July.....	82	82	80	80	-----	105	76
August.....	87	83	83	84	-----	106	84
September.....	89	79	84	86	-----	105	88
October.....	90	82	85	90	-----	105	90
November.....	92	87	88	94	-----	106	91
December.....	98	99	91	96	-----	109	98
1923.							
January.....	100	97	93	95	-----	113	101
February.....	102	109	96	96	-----	118	100
March.....	107	114	98	99	-----	119	108
April.....	107	114	100	98	106	117	107
May.....	105	111	100	98	108	116	104
June.....	104	106	99	99	108	109	105
July.....	100	98	101	100	105	98	101
August.....	96	94	101	101	98	84	96
September.....	94	90	102	103	92	80	93
October.....	94	87	102	103	93	79	95
November.....	96	89	104	104	95	81	98
December.....	95	90	103	105	94	87	94
1924.							
January.....	95	94	103	104	90	90	92
February.....	97	96	102	102	86	94	95

Employment and Earnings of Railroad Employees, January, 1924, and January and December, 1923.

THE following tables show the number of employees and the earnings in various occupations among railroad employees in January, 1924, in comparison with employment and earnings in December, 1923, and January, 1923.

The figures are for Class I roads—that is, all roads having operating revenues of \$1,000,000 a year and over.

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN JANUARY, 1924, WITH THOSE OF JANUARY AND DECEMBER, 1923.

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups.]

Month and year.	Professional, clerical, and general maintenance of way and structures.					
	Clerks.	Stenographers and typists.	Total for group.	Laborers (extra gang and work train).	Track and roadway section laborers.	Total for group.
<i>Number of employees at middle of month.</i>						
January, 1923.....	167,780	24,712	280,175	35,114	171,363	326,783
December, 1923.....	172,324	25,468	287,201	47,306	178,754	355,766
January, 1924.....	169,323	25,363	283,485	39,716	170,858	336,150
<i>Total earnings.</i>						
January, 1923.....	\$21,013,980	\$2,900,003	\$36,943,092	\$2,589,461	\$12,274,376	\$29,955,984
December, 1923.....	21,727,440	3,035,209	38,224,512	3,280,322	12,214,033	31,273,631
January, 1924.....	21,670,569	3,066,530	38,181,721	2,820,766	12,329,032	31,044,630
<i>Maintenance of equipment and stores.</i>						
	Carmen.	Machinists.	Skilled trade helpers.	Laborers (shops, engine houses, power plants, and stores).	Common laborers (shops, engine houses, power plants, and stores).	Total for group.
<i>Number of employees at middle of month.</i>						
January, 1923.....	132,311	66,286	136,620	52,820	63,253	580,324
December, 1923.....	127,069	65,298	123,827	48,902	61,229	559,331
January, 1924.....	123,537	64,612	121,267	49,165	61,079	551,859
<i>Total earnings.</i>						
January, 1923.....	\$19,409,896	\$11,958,617	\$15,940,584	\$5,217,408	\$5,205,802	\$78,755,708
December, 1923.....	16,902,697	9,505,053	12,495,665	4,689,811	4,754,659	67,913,745
January, 1924.....	17,350,917	16,167,737	13,073,363	4,838,634	4,941,814	70,632,854
<i>Transportation other than train and yard.</i>						
	Station agents.	Telegraphers, telephoners and towermen.	Truckers (stations, warehouses, and platforms).	Crossing and bridge flagmen and gatemen.	Total for group.	Transportation (yard masters, switch tenders, and hostlers).
<i>Number of employees at middle of month.</i>						
January, 1923.....	31,560	27,507	38,884	21,682	207,924	26,130
December, 1923.....	31,662	27,435	41,051	22,969	213,131	25,893
January, 1924.....	31,506	27,094	36,903	22,892	206,341	25,747
<i>Total earnings.</i>						
January, 1923.....	\$4,738,961	\$3,995,218	\$3,436,804	\$1,561,866	\$24,594,358	\$4,678,857
December, 1923.....	4,725,149	3,988,036	3,665,177	1,715,297	25,261,393	4,548,576
January, 1924.....	4,788,127	3,963,931	3,383,118	1,711,334	24,811,744	4,566,714

[831]

COMPARISON OF EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES IN JANUARY, 1924, WITH THOSE OF JANUARY AND DECEMBER, 1923—Concluded.

Month and year.	Transportation, train, and engine.					
	Road conductors.	Road brakemen and flagmen.	Yard brakemen and yardmen.	Road engineers and motor-men.	Road firemen and helpers.	Total for group.
<i>Number of employees at middle of month.</i>						
January, 1923.....	38,211	79,777	55,062	47,251	49,243	342,062
December, 1923.....	37,952	78,761	54,482	45,760	48,038	336,003
January, 1924.....	36,972	77,061	53,553	44,913	47,346	330,057
<i>Total earnings.</i>						
January, 1923.....	\$9,203,831	\$14,040,334	\$9,329,220	\$12,715,171	\$9,418,099	\$68,298,003
December, 1923.....	8,150,406	12,083,903	8,511,439	11,056,653	8,159,307	60,373,439
January, 1924.....	8,535,491	12,709,847	8,798,118	11,659,694	8,624,584	63,259,974

Extent of Operation of Bituminous Coal Mines, February 2 to 23, 1924.

CONTINUING a series of tables which have appeared in previous numbers of the MONTHLY LABOR REVIEW, the accompanying table shows for a large number of coal mines in the bituminous fields the number of mines closed the entire week and the number working certain classified hours per week from February 2 to February 23, 1924. The number of mines reporting varied each week, and the figures are not given as being a complete presentation of all mines but are believed fairly to represent the conditions as to regularity of work in the bituminous mines of the country. The mines included in this report ordinarily represent from 55 to 60 per cent of the total output of bituminous coal. The figures are based on data furnished the Bureau of Labor Statistics by the United States Geological Survey.

WORKING TIME IN THE BITUMINOUS COAL MINES IN THE UNITED STATES, BY WEEKS, FEBRUARY 2, 1924, TO FEBRUARY 23, 1924.

[The mines included ordinarily represent from 55 to 60 per cent of the total output. Prepared by the Bureau of Labor Statistics from data furnished by the United States Geological Survey.]

Week ending—	Number of mines reporting.	Mines—																Working full time of 48 hours or more.
		Closed entire week.		Working less than 8 hours.		Working 8 and less than 16 hours.		Working 16 and less than 24 hours.		Working 24 and less than 32 hours.		Working 32 and less than 40 hours.		Working 40 and less than 48 hours.				
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	
1924.																		
Feb. 2.---	2,369	735	31.0	39	1.6	114	4.8	264	11.1	361	15.2	348	14.7	269	11.4	239	10.1	8.3
Feb. 9.---	2,400	719	30.0	33	1.4	124	5.2	284	11.8	350	14.6	401	16.7	274	11.4	215	9.0	8.3
Feb. 16.---	2,364	711	30.1	24	1.0	118	5.0	273	11.5	395	16.7	407	17.2	239	10.1	197	8.3	8.3
Feb. 23.---	2,175	669	30.8	25	1.1	151	6.9	298	13.7	343	15.8	379	17.0	208	9.6	111	5.1	5.1

Recent Employment Statistics.

Connecticut.

THE report of the Connecticut Bureau of Labor for the month of January, 1924, on the operations of the five public employment offices in the State is summarized in the table following.

[832]

ACTIVITIES OF PUBLIC EMPLOYMENT OFFICES IN CONNECTICUT IN JANUARY, 1924.

Sex.	Applica- tions for employ- ment.	Applica- tions for help.	Situ- ations secured.	Per cent of appli- cants placed.		Per cent of appli- cations for help filled.	
				Jan., 1924.	Dec., 1923.	Jan., 1924.	Dec., 1923.
Males.....	1,655	1,216	1,003	66.0	71	89.9	(¹)
Females.....	1,610	1,555	1,390	86.3	90.2	89.4	(¹)
Total.....	3,265	2,771	2,483	76.0	87.1	89.6	93.7

¹ Not separately reported.

Illinois.

THE following figures, showing the percentage changes in volume of employment in Illinois, January, 1924, as compared with December, 1923, are taken from the Labor Bulletin, January and February, 1924, of the department of labor of that State:

PER CENT OF CHANGE IN NUMBER ON PAY ROLLS IN VARIOUS INDUSTRIES IN ILLINOIS FROM DECEMBER, 1923, TO JANUARY, 1924.

Industry.	Persons on pay roll in January, 1924.		Industry.	Persons on pay roll in January, 1924.	
	Number	Per cent of in- crease (+) or de- crease (-), as com- pared with De- cember, 1923.		Number	Per cent of in- crease (+) or de- crease (-), as com- pared with De- cember, 1923.
Stone, clay, and glass products.....	11,235	-1.5	Clothing, millinery, and laun- dering.....	21,293	+2.6
Metals, machinery, and con- veyances.....	157,533	-2.5	Food, beverages, and tobacco.....	45,122	-3.8
Wood products.....	16,493	-3.1	Trade—wholesale and retail.....	12,507	-12.9
Furs and leather goods.....	14,294	+ .5	Public utilities.....	78,651	-1.4
Chemicals, oils, paints, etc.....	12,853	+2.4	Coal mining.....	20,588	+7.1
Printing and paper goods.....	17,295	+ .5	Building and contracting.....	7,263	-19.3
Textiles.....	4,936	+1.3	All industries.....	420,063	-2.1

Iowa.

THE changes in volume of employment in important groups of industries in Iowa in January, 1924, as compared with the December, 1923, figures are indicated in the following tabular statement from the bureau of labor statistics of that State:

COMPARISON OF VOLUME OF EMPLOYMENT IN SPECIFIED INDUSTRIES IN IOWA IN JANUARY, 1924, AND DECEMBER, 1923.

Industry group.	Number of firms reporting.	Number on pay roll, January, 1924.			Per cent of increase (+) or decrease (-), Janu- ary, 1924, as com- pared with December, 1923.
		Males.	Females.	Total.	
Food and kindred products.....	57	10,694	1,772	12,466	-2.0
Textiles.....	32	830	2,208	3,038	+9.2
Iron and steel work.....	75	9,455	364	9,819	+3.9
Lumber products.....	43	4,711	127	4,838	+1.4
Leather products.....	14	635	284	919	+9.0
Paper products, printing, and publishing.....	23	2,129	998	3,127	-1.4
Patent medicines.....	9	200	375	575	-3.9
Stone and clay products.....	33	2,901	42	2,943	-7.0
Tobacco, cigars.....	5	126	305	431	+17.7
Railway car shops.....	6	9,034	159	9,193	+4.9
Various industries.....	70	4,669	6,435	11,104	-6.0
Total.....	367	45,384	13,069	58,453	+0.5

[833]

Maryland.

THE figures given below, furnished by the commissioner of labor statistics of Maryland, show the percentage differences between the numbers of employees, and between the amounts of pay rolls in January and February, 1924, in various industries in that State:

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS IN JANUARY AND FEBRUARY, 1924.

Industry.	Number of establishments reporting.	Period of pay roll.	Number on pay roll in February, 1924.	Per cent of increase (+) or decrease (-) as compared with January, 1924.	Amount of pay roll in February, 1924.	Per cent of increase (+) or decrease (-) as compared with January, 1924.
Bakery.....	4	1 week.....	528	+9.5	\$10,403.07	+5.6
Beverages and soft drinks.....	5	do.....	193	+7.2	5,328.03	+11.2
Boots and shoes.....	8	do.....	1,314	-2.5	23,359.65	-2.7
Boxes, paper and fancy.....	9	do.....	487	+5.9	7,115.21	+4.5
Boxes, wooden.....	6	do.....	267	+8	4,654.14	-6.8
Brass and bronze.....	4	do.....	2,588	+2.9	59,242.54	+5
Brick, tile.....	6	do.....	782	-12.3	18,655.57	+1.9
Brushes.....	6	do.....	1,120	+3.7	21,951.77	+3.8
Canning and preserving.....	3	do.....	264	+65.0	4,432.65	+13.5
Car building and repairing.....	3	do.....	4,376	-5.0	140,598.00	-1.2
Chemicals.....	7	do.....	1,481	+1	39,900.68	-8
Clothing, men's outer garments.....	5	do.....	2,509	-2.2	62,741.49	+2.1
Clothing, women's outer garments.....	9	do.....	1,314	+2.4	18,479.64	+5.1
Confectionery.....	5	do.....	653	-19.1	10,176.03	-1.7
Cotton goods.....	7	do.....	1,744	-1.8	26,141.89	+1.5
Fertilizer.....	8	do.....	1,095	+9.4	30,886.55	-3.2
Food preparations.....	3	do.....	112	-5.7	2,090.99	+5.5
Foundry.....	12	do.....	1,212	-2.1	32,671.31	-4.0
Furniture.....	9	do.....	721	-7	18,468.00	+5.7
Glass.....	4	do.....	1,213	-3.9	25,716.38	+1.5
Ice cream.....	5	do.....	341	+2.4	9,941.76	+0.8
Leather goods.....	6	do.....	638	-3.5	12,522.97	-2.6
Lithographing.....	4	do.....	453	-1.3	13,326.78	+6.8
Lumber and planing.....	7	do.....	416	-10.5	10,113.72	-9.8
Mattresses and spring beds.....	3	do.....	86	-2.3	1,947.01	-1.3
Men's furnishing goods.....	8	do.....	3,536	+5.7	44,729.61	+5.7
Patent medicines.....	4	do.....	268	+2.7	4,527.00	+2.5
Pianos.....	3	do.....	907	-4.4	23,060.36	+21.6
Plumber's supplies.....	3	do.....	920	-97	25,383.13	-2.2
Printing.....	11	do.....	1,471	-4	48,637.08	-2.1
Rubber tire manufacturing.....	1	1 month.....	2,550	+14.1	156,890.85	+34.5
Shipbuilding.....	3	1 week.....	791	+5	21,542.01	+2.0
Shirts, etc.....	6	do.....	1,464	-1.1	20,831.89	+1.5
Silk goods.....	4	do.....	495	-37.4	8,175.50	-28.3
Slaughtering and meat packing.....	4	do.....	1,524	-1.0	40,340.02	-3.9
Stamping and enamel ware.....	5	do.....	1,179	+6	23,746.79	+4.0
Tinware.....	4	do.....	2,113	+5.3	43,775.37	+2.3
Tobacco.....	9	do.....	1,615	+11.9	23,581.03	+5.6
Umbrellas.....	3	do.....	356	+7.6	6,107.51	+6.9
Miscellaneous.....	14	do.....	4,198	+8.3	97,105.32	+9.8

Massachusetts.

THE Massachusetts Department of Labor and Industries in a recent press release makes the following report on volume of employment and average earnings in 814 identical establishments of the State for a specified week in December, 1923, and in January, 1924:

NUMBER OF EMPLOYEES AND AVERAGE WEEKLY EARNINGS IN MASSACHUSETTS MANUFACTURING ESTABLISHMENTS, WEEK INCLUDING OR ENDING NEAREST TO DECEMBER 15, 1923, AND JANUARY 15, 1924.

Industry.	Number of establishments.	Number of employees on pay roll.		Average weekly earnings.	
		December, 1923.	January, 1924.	December, 1923.	January, 1924.
Automobiles, including bodies and parts.....	11	2,269	1,722	\$32.98	\$28.67
Boot and shoe cut stock and findings.....	48	1,695	1,797	22.06	22.55
Boots and shoes.....	69	22,172	22,566	23.03	23.65
Boxes, paper.....	25	2,182	2,099	20.15	20.19
Boxes, wooden packing.....	10	957	897	22.37	22.10
Bread and other bakery products.....	36	3,400	3,360	23.29	22.91
Cars and general shop construction and repairs, steam railroad companies.....	4	3,318	3,313	33.27	30.06
Clothing, men's.....	26	2,301	2,240	21.55	23.13
Clothing, women's.....	25	1,062	994	18.88	18.99
Confectionery.....	13	3,854	3,492	17.95	18.62
Copper, tin, sheet iron, etc.....	13	798	762	27.73	29.09
Cotton goods.....	40	34,539	30,798	20.20	20.55
Cutlery and tools.....	23	4,904	4,622	24.38	24.05
Dyeing and finishing, textiles.....	6	6,741	5,118	24.66	23.88
Electrical machinery, apparatus, and supplies.....	12	12,213	11,933	27.03	27.77
Foundry and machine shop products.....	67	10,278	9,985	28.72	27.85
Furniture.....	25	2,410	2,324	26.96	26.31
Hosiery and knitted goods.....	8	4,263	4,138	16.94	17.71
Jewelry.....	29	2,972	2,878	24.12	23.08
Leather, tanned, curried, and finished.....	24	4,624	4,709	26.68	26.67
Machine tools.....	23	2,220	2,171	27.50	27.73
Musical instruments.....	8	1,009	982	28.31	28.42
Paper and wood pulp.....	20	5,811	5,660	25.40	26.26
Printing and publishing, book and job.....	31	2,678	2,595	31.07	31.90
Printing and publishing, newspaper.....	22	2,077	1,852	40.91	40.28
Rubber goods.....	6	1,764	1,837	25.54	23.49
Rubber footwear.....	3	9,034	8,253	25.67	24.63
Rubber tires and tubes.....	3	1,050	1,068	33.82	33.40
Silk goods.....	11	2,082	2,098	20.14	20.18
Slaughtering and meat packing.....	4	1,809	1,803	27.52	23.35
Stationery goods.....	8	1,294	1,047	19.06	20.16
Steam fitting and steam and hot-water heating apparatus.....	6	1,549	1,572	27.17	28.67
Textile machinery and parts.....	13	6,497	6,180	28.56	28.00
Tobacco.....	7	1,096	1,039	24.49	24.70
Woolen and worsted goods.....	38	15,181	15,055	23.31	22.07
All other industries.....	97	30,978	31,010	26.40	26.22
Total.....	814	213,081	203,969	24.50	24.48

While the decrease in the total number of persons on the pay roll in January, 1924, compared with December, 1923, was 4.3 per cent, the fall in average weekly wages was only 0.4 per cent. Average weekly earnings were higher in 18 industries and lower in 17 industries in January, 1924, than in the preceding month.

Among the outstanding decreases in volume of employment for the period under review are those listed below:

	Per cent.
Dyeing and finishing textiles.....	24.1
Automobiles, including bodies and parts.....	24.1
Stationery goods establishments.....	19.1
Cotton goods.....	10.8
Printing and publishing, newspaper.....	10.8

The reports of the public employment offices of Massachusetts for the 12 months of 1923 and for January, 1924, together with the summary record for 1922¹ are given below:

ACTIVITIES OF MASSACHUSETTS PUBLIC EMPLOYMENT OFFICES FOR JANUARY, 1924, AND YEARS 1923 AND 1922.

Month.	Work- ing days.	Applica- tions for positions.	Applica- tions for help.	Number of persons referred to positions.	Number of persons reported placed.
Four offices, month of January, 1924	26	33,698	2,555	3,497	2,178
1923:					
January	26	30,640	4,384	5,047	3,506
February	23	26,701	3,810	4,450	2,929
March	27	30,594	5,144	5,718	3,903
April	24	30,219	5,730	6,389	4,135
May	26	29,531	5,799	6,517	4,535
June	26	27,649	4,548	5,534	3,762
July	25	31,152	3,745	4,699	2,933
August	26	30,906	3,512	4,223	2,829
September	24	28,622	3,946	4,796	3,170
October	26	31,089	4,067	5,213	3,383
November	25	30,802	3,235	4,296	2,843
December	25	28,489	2,493	3,189	2,117
Total: 1923	303	356,394	50,413	60,071	40,044
1922	303	421,285	50,312	57,874	38,469

¹ Except the Boston offices, 25 days (closed June 17).

The increases shown in the above table in the number of persons placed and the number of persons called for in January, 1924, compared with December, 1923, were slight but encouraging, indicating "that the downward trend of employment, observed during the last 3 months of 1923 has at least been checked, if not definitely deflected upward."

The number of persons reported placed by the 4 public employment offices in the first month of 1924 was 37.9 per cent less than in the first month of 1923 and the number of persons called for was 41.7 per cent less in January, 1924, than in January, 1923. These decreases showed the effect of curtailed production upon the employers' demands for labor at these State offices.

New York.

THE following advance figures from the New York State Department of Labor show the fluctuations in number of employees and amount of pay roll in certain manufacturing industries, January, 1924, compared with December, 1923, and January, 1923:

¹ Data are from typewritten material from Massachusetts Department of Labor and Industries.

CHANGES IN VOLUME OF EMPLOYMENT AND PAY ROLL IN NEW YORK STATE MANUFACTURING INDUSTRIES, JANUARY AND DECEMBER, 1923, TO JANUARY, 1924.

Industry	Per cent of change.			
	December, 1923, to January, 1924.		January, 1923, to January, 1924.	
	Employment.	Pay roll.	Employment.	Pay roll.
Cement.....	-4.7	-6.6	+15.6	+37.0
Brick.....	-13.2	-14.8	+23.8	+58.2
Pottery.....	-3.4	+1	+5.7	+22.4
Glass.....	+7	-1.1	-6.6	-6
Pig iron and rolling mill products.....	-2.6	-3.0	-3.0	+7.4
Structural and architectural ironwork.....	-1.7	-2.0	+14.0	+19.7
Hardware.....	-6	-1.6	+6.1	+14.8
Stamped ware.....	-1.7	+7	-14.8	-7.7
Cutlery and tools.....	-2.7	-9	+3.7	+14.2
Steam and hot-water heating apparatus.....	+3.8	+2.8	-17.0	-3.8
Stoves.....	-12.8	-11.0	-14.0	-4.2
Agricultural implements.....	+2.0	(¹)	-5.6	+6.7
Electrical machinery, apparatus, etc.....	(¹)	-8	+8.5	+25.2
Foundry and machinery shops.....	+1.2	-1.2	-6.2	+4
Automobiles and parts.....	+1.3	+7.1	+11.8	+17.0
Locomotive and equipment factories.....	-13.9	-16.3	-17.9	-9.8
Railway repair shops.....	-1.6	-8.5	-5.8	-11.9
Lumber, millwork.....	-2	-4	+6.3	+16.2
Lumber, saw mills.....	-6.6	-7.3	-9.4	+9.1
Furniture.....	-2	-5.7	-3.3	+2.7
Pianos, organs, and other musical instruments.....	-7	-3.9	+9.8	+19.0
Leather.....	+3	+1.3	-12.9	-2
Boots and shoes.....	-1.7	-3.6	-3.7	-6.1
Drugs and chemicals.....	+1	+2	+4.4	+15.8
Petroleum refining.....	-2.7	-5.2	-2.7	+1.8
Paper boxes and tubes.....	-1.7	-2.4	-2.0	+6.7
Printing, newspapers.....	+1.7	+1.9	-7	+5.3
Printing, book and job.....	+8	+2.7	-4.0	+1.5
Silk and silk goods.....	-1.0	-4.5	-2.9	-1.6
Cotton goods.....	-1.0	-4.6	-19.2	-18.7
Cotton and woolen hosiery and knit goods.....	-3.4	-7.4	-4.9	+9
Carpets and rugs.....	-1.0	+2.2	+4.0	-3.4
Woolens and worsteds.....	+4.5	-7.4	-18.7	-18.2
Dyeing and finishing textiles.....	-25.1	-27.5	-27.1	-28.3
Men's clothing.....	+5.1	+3.8	-5.8	-7.0
Shirts and collars.....	-4.0	-3.0	-13.2	-17.0
Women's clothing.....	+8.2	+14.8	-7.2	-6.6
Women's headwear.....	+3.8	+12.7	-5.2	+3
Flour.....	-2	-9	+5.4	+14.4
Bread and other bakery products.....	-3.2	-9	+7.8	+13.8
Confectionery and ice cream.....	-17.4	-15.1	-6.1	+2.6
Sugar refining.....	+5	-4.8	-35.0	-19.0
Slaughtering and meat products.....	+1.2	-2.4	+6.2	+16.1
Cigars and other tobacco products.....	(²)	+1.9	-7.4	+1.9

¹ Increase of less than one-half of 1 per cent.² Decrease of less than one-half of 1 per cent.Employment in February, 1924.²

Factory employment rose about 1 per cent in February, 1924. This increase resulted from a decided gain in the apparel industries. Another seasonal rise occurred in the manufacture of men's and women's outer garments and headgear. The fur industries and the shops making leather goods showed a distinct improvement in comparison with their low level of employment in January. There was a small gain in the shoe industry. Activity in the textile industries substantially increased and gains were shown in the knitting mills and textile finishing, carpet, and felt mills.

Volume of employment in the metal industries, taken as a whole, was about the same as in December, 1923. Drastic reductions in

² Data are from typewritten report from New York State Department of Labor.

the locomotive and equipment factories and in the shipyards were counterbalanced by increases in nearly all of the other metal industries. The most outstanding gain was in the iron and steel mills, but there were decided increases also in sheet-metal goods, stove and heating apparatus, and automobiles.

The resumption of operations in the sugar refineries and greater activity in the bakeries and biscuit factories increased the volume of employment in the food industries as a whole, although there were many seasonal decreases.

Heavy declines took place in the brickyards in February. The cement mills reduced the number of their employees, which was, however, a rather late seasonal adjustment. Printing plants were also less active in February.

Wisconsin.

THE course of employment and the per cent of increase or decrease in pay rolls in various groups of business activities in Wisconsin in certain specified periods are shown in the following table, which is a summary of advance information received February 21, 1924, from the industrial commission of that State:

PER CENT OF CHANGE IN NUMBER OF EMPLOYEES AND TOTAL PAY ROLL IN VARIOUS INDUSTRIES IN WISCONSIN, JANUARY, 1924, COMPARED WITH JANUARY AND DECEMBER, 1923.

Industry.	Per cent of increase (+) or decrease (-) in number of employees from—		Per cent of increase (+) or decrease (-) in total pay roll from—	
	December, 1923, to January, 1924.	January, 1923, to January, 1924.	December, 1923, to January, 1924.	January, 1923, to January, 1924.
<i>Manual.</i>				
Logging.....	+12.5	+32.2		
Mining.....	+6.5	+97.9	-8.7	+142.9
Stone crushing and quarrying.....	-10.2	-8.3	-22.7	+52.2
Manufacturing.....	-5	+26.7	-4.2	+51.4
Stone and allied industries.....	-6.0	+35.6	-14.8	+101.1
Metal.....	+1.7	+48.2	-7	+102.8
Wood.....	+2.4	+24.3	-3.5	+45.8
Rubber.....	-2.4	+47.0	-7.8	+76.9
Leather.....	-5	+4.8	+1	+16.6
Paper.....	-3	+18.2	-9.5	+18.7
Textiles.....	-1.1	+2.0	-4.2	-1.5
Foods.....	-6.5	+17.9	-14.7	+30.9
Light and power.....	-20.6	+39.5	-17.8	+42.6
Printing and publishing.....	-9	+17.2	-4.8	+24.1
Laundering, cleaning, and dyeing.....	-1.8	+19.7	-6.0	+43.2
Chemicals (including soap, glue, and explosives).....	-1.2	+11.6	+6	+15.3
Building construction.....	-21.4	+49.4	-29.5	+65.5
Highway construction.....	-58.6	-41.5		
Railroad construction.....	-2.3	+3	-2.0	-8.2
Marine dredging, etc.....	-33.6	+9.1	-34.6	+58.8
Steam railways.....	-1.9	+6.3	+3.3	+20.9
Electric railways.....	+3.1	-2.3	+5.3	+8.1
Express, telephone, and telegraph.....	-7.9	+29.4	-5.6	+37.8
Wholesale trade.....	-9.5	+8.6	-10.4	+21.7
Hotels and restaurants.....	-5.1	+5.7		
<i>Nonmanual.</i>				
Manufacturing, mines, and quarries.....	-1.5	+9.9	-7	+9.5
Construction.....	-4.8	-1.7	-3.9	+9.0
Communication.....	-1.3	+1.9		+9.0
Wholesale trade.....	+4	+3.1	-4.3	+4.4
Retail trade—sales force only.....	-25.1	+4.2	-16.8	+13.4
Miscellaneous professional services.....	+1.1	+4.0	-12.8	+22.6
Hotels and restaurants.....	+1.5	+8.9		

Further light is cast on conditions in the Wisconsin labor market by the report given below on the number of persons placed by the public employment offices in the State in January and December, 1923, and in January, 1924:

NUMBER OF PLACEMENTS MADE BY WISCONSIN PUBLIC EMPLOYMENT OFFICES
IN JANUARY AND DECEMBER, 1923, AND JANUARY, 1924.

Industry.	January, 1924 (4 weeks).	December, 1923 (5 weeks).	January, 1923 (4 weeks).
Agriculture.....	149	246	173
Building and construction.....	78	155	79
Casual workers.....	2,677	3,224	1,521
Clerical, professional and technical.....	119	155	128
Common labor.....	637	972	777
Domestic and personal service.....	344	374	376
Hotel and restaurant.....	220	230	139
Lumber.....	774	888	640
Manufactures:			
Chemicals.....	3	3	—
Clothing and textiles.....	16	26	27
Food, beverages, and tobacco.....	23	38	11
Leather, rubber, and allied products.....	18	21	6
Metals and machinery.....	398	351	157
Paper.....	25	25	11
Printing.....	1	7	3
Woodworking.....	123	64	29
Mines and quarries.....	—	—	5
Shipbuilding.....	—	—	3
Theaters and amusements.....	—	—	2
Transportation and public utilities.....	107	235	60
Wholesale and retail trade.....	44	69	66
Miscellaneous.....	46	44	46
All industries.....	5,802	7,127	4,250

INDUSTRIAL ACCIDENTS AND HYGIENE.

Metal-Mine Accidents in the United States in 1922.

THE report of the United States Bureau of Mines on metal-mine accidents in the United States during the calendar year 1922 (Technical Paper 354) shows a slight increase in the injury rates over the preceding year and a somewhat higher fatality rate, owing largely in the latter case to a disastrous mine fire in California which caused the loss of 47 lives.

There was an increase of more than 30 per cent in the volume of work done in metal mines in 1922 as compared with 1921. The operators' reports show that there was a total of 105,697 men employed during the year and the average number of days worked per man was 276, as compared with 93,929 employees and 238 average workdays in the preceding year. Underground employees averaged 284 working-days and those working above ground 254 days per man.

The number of shifts worked by all employees was 68 per cent greater in copper mining in 1922 than in 1921, 29 per cent greater in iron mining, 10 per cent greater in gold and silver mines and those producing minor metals, 53 per cent greater in lead and zinc mining, and 10 per cent greater in mines producing nonmetallic minerals.

Mine accidents resulted in the death of 344 men and the injury of 26,080 others. The fatality rate per 1,000 300-day workers was 3.54 in 1922 and 3.09 in 1921. The injury rate was 268.48 and 249.69 for 1922 and 1921, respectively, each injury reported causing disability for at least one day. Underground workers showed a fatality rate of 5.01 per 1,000 full-time workers and an injury rate of 348.71; corresponding rates for open-pit workers were 2.17 and 118.67, and for employees in surface shops and yards, 0.83 and 151.59.

The statistical material presented in the report is based on the voluntary reports of 2,599 operators, while reports for Alaska were furnished by the Territorial mine inspector and for California by the State industrial commission. It is believed the figures published are reasonably complete for the entire metal-mining industry.

The following table shows the number of fatalities and of serious and slight injuries in metal mines in the United States, 1915 to 1922:

FATAL, SERIOUS, AND SLIGHT INJURIES IN METAL MINES IN THE UNITED STATES,
1915 TO 1922.

Type of injury.	Number of injuries.							
	1915	1916	1917	1918	1919	1920	1921	1922
Fatal.....	553	697	852	646	468	425	230	344
Serious (time lost more than 14 days):								
Permanent disability—								
Total ¹	35	44	39	62	7	12	7	9
Partial ²	574	693	666	640	321	345	173	231
Others.....	7,242	10,099	10,220	9,066	7,848	7,894	4,817	6,510
Slight (time lost, 1 to 14 days).....	27,444	37,401	35,361	33,147	23,330	24,311	13,607	19,330
Total nonfatal injuries.....	35,295	48,237	46,286	42,915	31,506	32,562	18,604	26,080
Grand total (fatal and nonfatal).....	35,848	48,934	47,138	43,561	31,976	32,987	18,834	26,424
Men employed.....	152,118	204,685	200,579	182,606	145,262	136,583	93,929	105,697

¹Permanent total disability: Loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis, or other condition permanently incapacitating workman from doing any work of a gainful occupation.

²Permanent partial disability: Loss of one foot, leg, hand, eye, one or more fingers, one or more toes, any dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability.

The following table shows the number of employees, the number of fatalities and injuries, and the fatal and nonfatal accident rates, by kind of mine, in 1921 and 1922:

NUMBER EMPLOYED, NUMBER KILLED AND NUMBER INJURED, AND FATAL AND
NONFATAL ACCIDENT RATES IN METAL MINES, 1921 AND 1922.

Kind of mine.	Active operators.	Average days worked.	Men employed.		Killed.		Injured. ¹	
			Actual number.	Equivalent number of 300-day workers.	Number.	Rate per 1,000 300-day workers.	Number.	Rate per 1,000 300-day workers.
1921.								
Copper	357	244	18,300	14,871	55	3.70	4,722	317.53
Gold, silver, and miscellaneous metal	2,135	269	26,516	23,738	78	3.29	5,352	225.46
Iron	122	210	30,559	21,369	65	3.04	4,507	210.91
Lead and zinc (Mississippi Valley)	66	234	6,948	5,431	14	2.58	2,062	379.67
Nonmetallic mineral	216	235	11,606	9,101	18	1.98	1,961	215.47
Total	2,896	238	93,929	74,510	230	3.09	18,604	249.69
1922.								
Copper	274	292	25,739	25,017	75	3.00	8,025	320.78
Gold, silver, and miscellaneous metal	1,942	284	27,614	26,144	140	5.35	6,805	260.29
Iron	110	257	32,241	27,621	83	3.00	4,901	177.44
Lead and zinc (Mississippi Valley)	74	278	8,990	8,332	22	2.64	3,868	464.23
Nonmetallic mineral	199	271	11,113	10,024	24	2.39	2,481	247.51
Total	2,599	276	105,697	97,138	344	3.54	26,080	268.48

¹ Time lost more than one day.

The report also gives detailed information in regard to the distribution of accidents according to causes and by States, in the different classes of mines, and accidents classified according to mining methods. There is also a comparison of the accident rates in all branches of the mineral industry for which statistics are compiled by the Bureau of Mines.

[841]

Accidents at Metallurgical Works in the United States in 1922.

THE statistics of accidents at metallurgical works compiled by the United States Bureau of Mines (Technical Paper 350) represent the entire metallurgical industry of the United States, except iron blast-furnace plants for which accident reports are not received by the bureau. The reports are furnished voluntarily and directly by operators of ore-dressing plants and smelters with the exception of California, the data for that State being furnished by the State industrial accident commission. The figures for smelting plants cover copper, lead, gold, and silver smelters and refineries, and ore-dressing plants represent concentrating plants for copper, lead, and zinc ores; stamp mills; cyanide plants; iron-ore washers; flotation mills; and sampling works.

The number of men employed in these works during 1922 was 44,000, an increase of 32 per cent over 1921. The average working time per man was 314 days, an increase of 15 per cent, and the total exposure to risk—that is, the amount of labor performed by all employees—was equal to 13,802,318 man-days, which was an increase of 56 per cent over the revised figures for the preceding year.

The fatality rate for the year was 0.98 per 1,000 300-day workers and the nonfatal injury rate was 145.15. The corresponding rates for the preceding year were 0.76 and 126.74. The figures for 1922 divided into three main groups show that for mills the accident rates were 1.09 killed and 179.51 injured per 1,000 employees; for smelters, 0.77 killed and 143.71 injured; and for auxiliary works such as yards, shops, and construction work, 1.21 killed and 120.26 injured.

There was a total of 6,723 accidents occurring in these works during the year, 0.67 per cent of which were fatal, while 0.03 resulted in permanent total disability, 1.13 per cent in permanent partial disability, 24.17 per cent in temporary disability lasting more than 14 days, and 74 per cent in disability lasting from 1 to 14 days.

The following table shows the number of accidents at metallurgical works in the United States during the years 1916–1922, classified according to severity:

ACCIDENTS AT METALLURGICAL WORKS IN THE UNITED STATES, 1916 TO 1922.

Type of injury.	Number of injuries.						
	1916	1917	1918	1919	1920	1921	1922
Fatal.....	83	116	94	64	61	27	45
Serious (time lost, more than 14 days):							
Permanent disability—							
Total ¹	17	5	7	2	2	0	2
Partial ²	200	202	247	71	147	39	76
Others.....	3,443	3,302	3,028	1,869	1,990	1,025	1,625
Slight (time lost, 1 to 14 days, inclusive).....	11,420	10,069	9,411	6,184	6,724	3,431	4,975
Total nonfatal injuries.....	15,080	13,578	12,693	8,126	8,863	4,494	6,678
Grand total (fatal and nonfatal).....	15,163	13,694	12,787	8,190	8,924	4,521	6,723
Men employed.....	80,201	84,042	79,752	61,120	50,232	37,465	44,000

¹ Permanent total disability: Loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis, or other condition permanently incapacitating workman from doing any work of a gainful occupation.

² Permanent partial disability: Loss of one foot, leg, hand, eye, one or more fingers, one or more toes, any dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability.

³ "Other serious accidents" in 1919 include 50 cases of permanent partial disability; in 1920, 72 cases of permanent partial disability and 1 case of permanent total disability; in 1921, 18 cases of permanent partial disability and 2 cases of permanent total disability; and in 1922, 83 cases of permanent partial disability and 2 cases of permanent total disability.

[842]

The ratio of accident occurrence to the amount of exposure to risk has been computed by the Bureau for the first time and is shown in this report for the year 1922, the figures relating only to mills and smelters. The frequency of accidents of varying degrees of severity is shown for men working 8 hours, 9 hours, and 10 hours a day. No rates are shown for 11-hour and 12-hour men as less than 500 men were employed in each of these groups, or for 10-hour men in smelters because of the small number employed. These figures are not considered conclusive until they are confirmed by data covering a longer period, but they are the only evidence available at present as to the influence of the length of shift upon the accident hazard to which men employed at mills and smelters are exposed. The total number of men employed in mills was 10,979 and in smelters 19,134. The following table shows the fatalities and injuries in metallurgical works per 1,000,000 hours of exposure, classified by length of shift, for the year 1922:

FATALITIES AND INJURIES IN METALLURGICAL PLANTS PER 1,000,000 HOURS OF EXPOSURE, CLASSIFIED BY LENGTH OF SHIFT, YEAR ENDED DECEMBER 31, 1922.

Character of disability.	Rate per 1,000,000 hours' exposure, in shifts of—		
	8 hours.	9 hours.	10 hours.
Mills:			
Fatal.....	0.469		0.554
Permanent total disability.....			.277
Permanent partial disability.....	.391		1.661
Other serious.....	12.818	12.729	14.672
Slight.....	40.096	26.306	98.276
Total injuries (nonfatal).....	53.305	39.035	114.886
Total fatalities and injuries.....	53.774	39.035	115.440
Smelters:			
Fatal.....	.359	1.292	
Permanent total disability.....	.030		
Permanent partial disability.....	1.047	1.292	
Other serious.....	16.248	43.934	
Slight.....	45.662	51.271	
Total injuries (nonfatal).....	62.987	99.497	
Total fatalities and injuries.....	63.346	100.789	

Poisoning From Small Quantities of Mercurial Vapor.¹

A STUDY of mercurial poisoning resulting from the inhalation of small quantities of mercurial vapor by persons operating electric induction furnaces has been made by Dr. J. A. Turner of the industrial hygiene and sanitation division of the United States Public Health Service.

The study was prompted by the appearance of symptoms of poisoning among chemists in a Government metallurgical laboratory believed to be due to exposure to a substance emanating from the electric induction furnaces operated by them. These furnaces are similar in type, though somewhat smaller, to those used in certain industries so that the study is of added significance because of its relation to the occurrence of mercurialism among industrial workers.

¹ United States Public Health Service, Public Health Reports, Feb. 22, 1924, pp. 329-341: "Mercurial poisoning," by Dr. J. A. Turner.

The induction furnaces, one of 10-kilowatt and one of 20-kilowatt capacity, located in separate rooms, were in use in the laboratory. The point of interest in the mechanical construction of the smaller furnace was the mercury gaps in which two electrodes passed through loosely fitting sleeves in the furnace cover, so that the electrodes could be raised or lowered, and thus adjusted to the metallic mercury. The electrodes and furnace jackets were water-cooled and ethyl alcohol was allowed to drip on the mercury for the purpose of limiting its vaporization. In spite of the water-cooling system and the alcohol, however, the escape of mercury was evidenced by globules of various sizes on the safety cage surrounding the furnace.

Samples of dust were collected in different parts of the furnace room and the analysis of these samples showed from 1 to 3 per cent mercury content. Air samples were collected by the use of a Palmer dust machine in order to determine the approximate severity of exposure to mercury vapors emanating from the induction furnaces. These samples were taken at a distance of $1\frac{1}{2}$ to 2 feet from the furnace at about the level of the furnace operator's face and after the furnace had been run for different periods of time. The 10-kilowatt furnace was of the old type with the loose fitting sleeves in the furnace cover. A 20-kilowatt furnace in which the electrodes were set stationary in the gap cover and were mercury sealed was also used for air samples. While this type is an improvement over the old type it was found that it did not entirely prevent the escape of mercury. Analysis of air samples from the 20-kilowatt furnace showed that they contained on an average 0.0133 milligram of mercury per cubic foot of air. Operators of the 10-kilowatt furnace who were exposed to 0.02 milligram of mercury per cubic foot of air with a daily exposure ranging from 3 to 5 hours were estimated to take into their systems 0.771 milligram during 3 hours' exposure and 1.285 milligrams during 5 hours' exposure.

The small quantities of mercury escaping from the 20-kilowatt furnace show how readily mercury is vaporized, even when it is well inclosed as in this type of furnace, and that exposure should be guarded against by removal of the vapor at its source by a forced exhaust system.

Another method of determining the amount of mercury in the air was used as a check on the first study. This consisted in drawing the air through a carefully weighed glass tube filled with gold leaf and glass wool in alternate layers. The mercury passing through the tube amalgamated with the gold leaf and the quantity of mercury was determined by the increase in weight. The first method used in analyzing the laboratory air (that is, the collection of dust in the Palmer machine) showed somewhat larger quantities of mercury, but this is in part at least accounted for by the difference in the flow of air, the air being drawn through the Palmer machine at a very much higher rate of speed, and by the difference in methods of measuring the mercury. In spite of these differences in method, however, there was "not a very wide difference in the end results."

There were five men who had been exposed to the mercury vapors for a sufficient length of time to show evidences of poisoning. Three of these men were operating the induction furnaces at the time the study was made while two had operated the furnaces previous to the

[844]

investigation. All these men were given thorough physical examinations. The two who had been previously exposed had shown symptoms of the mercurial poisoning at the time of exposure while the remaining three men who were operating the furnaces at the time of the study showed definite lesions and symptoms of mercurial poisoning.

The conclusions drawn as a result of the study are as follows:

1. Daily exposure to an atmosphere containing as small a quantity as 0.02 milligram of mercury per cubic foot of air results in signs and symptoms of poisoning. The histories indicate that daily exposure must continue for two to three months, or more, before symptoms appear.

2. It is estimated that in exposure to the above quantities of mercury for 3 to 5 hours daily there is a total daily absorption of mercury ranging from 0.771 to 1.285 milligrams, according to the duration of exposure.

3. Mercury is volatilized from both the 10 and 20 kilowatt induction furnaces during their operation. This mercury vapor is disseminated throughout the room and recondensed to the metallic form. This is evidenced by analysis of dust samples obtained at various distances from the furnaces, which showed the presence of from 1 to 3 per cent of mercury.

4. The objective symptoms of chronic mercurialism are manifested by a copper-colored discoloration of the mucous membrane of the pharynx, the pillars of the fauces, and the gums. This discoloration was constant in all cases and should not be confused with infective inflammatory processes, which it somewhat resembles. The gums are swollen, and there is enlargement of the capillaries. Superficial erosions appear upon the mucous membrane of the gums, and upon the buccal mucous membrane in the vicinity of the upper molar teeth. Periapical abscesses frequently occur and cause considerable discomfort. Occasionally there is an appreciable increase in the flow of saliva. Urine analysis and differential blood counts show the urine and the blood to be unaffected by the mercury absorbed. Subjective symptoms are characterized by tenderness of the gums and hypersensitiveness of the teeth, particularly those containing amalgam fillings. Activity of intestinal peristalsis is slightly increased, occasionally developing into mild attacks of diarrhea. Obstinate constipation is developed during absence from the laboratory for one to two weeks. Gastrointestinal disturbance is manifested by pain due to accumulation of gas; there is often distention and feeling of weight in the hypogastric and iliac regions. As mentioned, there are occasional attacks of diarrhea. Shifting neuralgic pains are occasionally felt in the various joints and in the chest.

5. The problem of the prevention of mercurial poisoning in laboratories and industrial establishments can best be solved by inclosing all apparatus in which mercury is used and by conveying the fumes away from the worker's face so that it will be impossible for him to inhale them.

Action of Irritant Gases Upon the Respiratory Tract.

AN ARTICLE on the physical effect of irritant gases on the respiratory tract, by Dr. Howard W. Haggard, was published in the *Journal of Industrial Hygiene*, February, 1924 (pp. 390-398). There is a large group of the so-called "irritants" among the gases and vapors found in industrial processes. The difference in the symptoms produced by the various gases belonging to this class is due not so much to the difference in their chemical properties as to the difference in their physical properties. This paper, of which the following is a summary, defines the action of these gases on different sections of the respiratory tract.

An irritant gas or vapor is one which produces inflammation in those tissues with which it comes in contact. This action is direct upon surface tissues, notably the mucous membrane of the eye and the respiratory membranes, and the effects are of the greatest severity on those surfaces which are most easily penetrated.

[845]

The effects of all the irritants on any part of the respiratory tract are essentially the same and differ only in degree. This effect, except in cases of exceptional intensity of the gas, is not that of simple and direct corrosion such as the effect of hydrochloric acid upon zinc, for the irritant gases act in such extreme dilution that gross chemical corrosion is not usually involved. If it is involved it causes almost instant death.

The different gases affect different sections of the respiratory tract. Ammonia produces intense congestion of the upper respiratory passages and immediate death from spasm or edema of the larynx, while phosgene and nitrogen peroxide have little effect on the upper respiratory tract but induce pneumonia or edema of the lungs. Chlorine is intermediary in its action between ammonia on the one hand and phosgene and nitrogen peroxide on the other.

The fact that the selective action of the various irritants is due to their physical rather than their chemical properties is especially true of solubility. A gas which is very soluble in water and is readily diffused in its solution is taken out of the inspired air by contact with the first moist tissue it touches. The result is that the upper respiratory passages are the parts most affected, the concentration of the irritant reaching the lungs being greatly reduced. In the case of a gas which has a very low solubility in water there is little of the gas absorbed in the upper respiratory passages and the principal damage is done deep in the lungs.

The degree of concentration of an irritant gas is of great importance. In the case of the volatile irritants the severity of the action does not vary according to the amount and duration of the application, but a high concentration, for even a short time, has an intense effect.

The inhalation of an irritant gas exercises an immediate effect on the nasal passages and the larynx, causing them to become acutely painful, and a series of reflexes are set in motion, such as coughing, constriction of the larynx and bronchi, closing of the glottis, and inhibition of respiration, which tend to prevent the penetration of the irritant to the deeper and more delicate parts of the respiratory tract.

Coughing is caused by even slight irritation, but this response to an irritant in the air varies in different individuals. Persons whose throats have been rendered sensitive by the use of tobacco or from infection cough more readily than normal persons, while those with chronic mild inflammatory or catarrhal conditions, because of decreased susceptibility, cough less readily. While coughing is, of course, no protection, it serves as a warning of the presence of these substances in the atmosphere.

The physiological efforts of the different parts of the respiratory tract for self-protection are of great importance, as the delicacy of the respiratory membranes and their susceptibility to injury increase in passing from the upper to the lower part of the tract. Although the nose and pharynx may be stripped raw they may receive little permanent damage, while the injury to the larynx and bronchi may result in the general systemic effects which are present in cases of acute laryngitis and bronchitis which develop from any cause. The lungs when directly acted upon by an irritant receive serious injury and edema or pneumonia may develop, with a possible fatal outcome.

If death is not an immediate result of lung edema, the usual symptoms of severe membranous bronchitis and tracheitis may last for several days, after which regeneration of the mucous membrane begins to take place, although there is almost always infection of the bronchi. In cases of severe inflammation of the upper respiratory tract there may be an edematous swelling of the larynx sufficient to close the opening of the trachea, in which case death may result from acute asphyxia. This is the common cause of fatalities occurring during or soon after severe exposure to the class of gases that affect this part of the respiratory tract. If death does not result at once from swelling of the larynx or spasm of the glottis, lung edema may develop, reaching the climax in from 12 to 24 hours, when if death does not occur inflammation tends to subside in from two to three days.

The effect of the action of the gas on the lungs is to interfere with the respiratory exchange of oxygen and carbon dioxide between the air and the blood and to obstruct the flow of blood through the lungs, thus placing a strain on the right side of the heart. Irritation of the lungs does not cause severe pain as does irritation of the upper air passages. The principal symptoms of lung edema are those of asphyxia which is not, however, associated with air hunger in its early stages. The patient may be an ashy gray color but with no difficulty in breathing, although he may be in danger of death, especially on making the least exertion. In the later stages the skin may be of a blue color and there may be intense air hunger. In nonfatal cases of pulmonary edema no medicinal measures are effective in affording relief, with the exception of oxygen which, however, has no markedly beneficial effect on the progress of the disease. The mortality from the pneumonia following gassing is high, death occurring in from four days to two weeks. An exposure which is not sufficient to cause the acute symptoms of lung irritation may cause pneumonia, and "under industrial conditions the infections thus induced constitute a greater cause of death than primary pulmonary edema. Many observers feel that irritant gas or vapor even in extreme dilution is to be regarded as predisposing to the development of pneumonia. The only exception to this statement is afforded by chlorine which, in low concentrations, seems to exert a bactericidal action without appreciable irritation."

On the other hand, there is considerable uncertainty as to the rôle of irritant gases as a predisposing factor in the development of pulmonary tuberculosis. This disease can not be said to arise as a direct sequel of irritation of the lungs as is the case with pneumonia. The statistics of the subsequent health of soldiers gassed during the war indicate that when the lungs have once healed they are not appreciably more liable to tuberculosis than would otherwise have been the case. On the other hand, when the subject has suffered a period of decreased vitality or ill health as a consequence of the action of irritant gases upon the respiratory tract or as a result of the subsequent acute infection, then tuberculosis may develop as a recurrence of a previously existing lesion just as is often the case following decreased vitality from any other cause. It often happens that the subject has had no knowledge of this preexistent but dormant infection; indeed, it may not have been elicited even by physical examination. In considering tuberculosis, however, it is necessary to assume that every normal healthy person carries a dormant infection and that the disease is liable to become clinically evident whenever the resistance of the body is lowered sufficiently. Thus gassing may fairly be said to be, in the ordinary use of the words, the cause of a tuberculosis progressing steadily from the occurrence of poisoning, but not of a tuberculosis developing at some time subsequent to virtually com-

[847]

plete recovery from the gassing itself. The crux of the question in any particular case is whether or not the gassing undermines the subject's general health.

Severe irritation of the lower respiratory tract may result in a chronic inflammatory condition and cause a long period of ill health. In some cases there is little evidence upon physical examination of persistent changes in the lungs and the subject at rest may appear normal although he is in reality capable of only very moderate exertion. In such cases an individual may be unjustly suspected of malingering.

Prolonged exposure to gas in quantities insufficient to cause death may result in chronic poisoning evidenced by a moderate inflammation of the upper respiratory tract associated with a sharp cough. If the exposure is incidental to regular working conditions the inflammation passes into a catarrhal state and the coughing becomes less marked. While the worker appears then to have acquired a degree of tolerance for the gas this is not the case, the protective reflexes having simply become less active and the effect of the catarrh is to leave the deeper respiratory tract more exposed to the action of the gas. In addition, chronic poisoning affects the general health, causing loss in weight and increased liability to acute infection and to the development of tuberculosis.

Most of the irritant gases act in such a way upon the respiratory tract that they are destroyed or neutralized and therefore are not absorbed into the body in their original form. As a rule there is no systemic poisoning following absorption of these products. Hydrogen sulphide and nitrogen peroxide are exceptions to this rule, however. Hydrogen sulphide is absorbed and neutralized in the respiratory tract to sodium sulphide and the absorption of this alkaline sulphide into the blood stream produces a profound systemic poisoning. Nitrogen peroxide when inhaled forms sodium nitrite and may cause nitrite poisoning, although the symptoms may be obscured by the much more acute pulmonary irritation.

Organic substances such as alcohols, ethers, aldehydes, volatile petroleum, and coal-tar products, which are generally classed as irritants, are absorbed from the respiratory tract without change. Their systemic effects are in general more severe than their action as pulmonary irritants.

The local action of these substances differs from that of the more common irritants in two respects: (1) The mucous secretion which results from their action upon the respiratory passages does not serve to form a protective coating against their action; the secretion neither neutralizes nor alters these substances, but rapidly becomes saturated with the gas at the tension inhaled. (2) The greater part of the irritant action occurs in the upper respiratory passages, bronchi, and bronchioles, while the lung alveoli and atria are relatively little affected. Such amounts of the gas as reach the lungs themselves are absorbed unchanged. This location of action is quite exceptional, for the solubility of these substances is usually quite low. The sparing of the deeper portion of the lungs is the result of the active absorption into the blood, which keeps the concentration of the irritant in the alveoli constantly at a low level.

The following table summarizes the effects of the different irritant gases, their solubility, and the concentrations which cause dangerous symptoms after exposure of one hour:

RELATION BETWEEN THE PHYSICAL PROPERTIES OF IRRITANTS AND THEIR SITE OF ACTION IN THE RESPIRATORY TRACT AND SUBSEQUENT SYMPTOMATOLOGY.

Irritant.	Approximate solubility in water, by volume, at 40°C. ¹	Site of main action upon respiratory tract.	Nature of local action.	Concentration dangerous to breathe for 1 hour (parts per million of air). ²	Symptomatology.
Ammonia gas.....	444 (extrapolated).	Upper respiratory tract.	Alkaline caustic.....	2,000	Elicits immediate and violent respiratory reflexes; coughing and arrest of respiration.
Hydrochloric acid gas.	385	do.....	Acid action. Neutralizes alkali of tissues and alters the reaction.	1,500	
Formaldehyde.....	Very soluble.	do.....	Combines with proteins and alters them.		Death from edema or spasm of larynx. Upper respiratory tract inflamed.
Sulphuric acid.....	Encountered as droplets.	do.....	Acid action		
Sulphur dioxide.....	18.7	Upper respiratory tract and bronchi.	Acid and oxidizing action.	400	Elicits respiratory reflexes. Rarely causes death from edema of the larynx. Trachea and bronchi inflamed. Lung edema rare.
Bromine.....	9.4	Both upper and lower respiratory tract.	Oxidizing action..	60	
Chlorine.....	1.4	do.....	do.....	40	Does not elicit marked respiratory reflexes. May be fatal in concentrations which cause no reflexes at all. Upper respiratory tract inflamed only after very severe exposure. Usually no immediate symptoms. Delayed death from lung edema.
Phosgene.....	Decomposes.	Lower respiratory tract.	Liberated HCl has acid action.	25	
Nitrogen peroxide.	do.....	do.....	Liberated HNO ₃ and HNO ₂ have acid and oxidizing action.	117	

¹ Landolt-Börnstein: Physikalisch-Chemische Tabellen. Berlin, Julius Springer, 1905, p. 599. 40°C.—104°F.

² Kobert, R.: Kompendium der praktischen Toxikologie. Stuttgart, F. Enke, 1912, p. 45.

³ The toxicity of phosgene is greater than that of nitrogen peroxide for the reason that a portion of the peroxide is decomposed into the relatively weak nitrous acid.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE.

Steadying the Worker's Income—Establishment Unemployment Insurance Plans.¹

By MARGARET GADSBY, OF THE UNITED STATES BUREAU OF LABOR STATISTICS.

UNEMPLOYMENT, like accidents or industrial diseases, is one of the hazards of industry; the fear of joblessness is an industrial poison, insidious and corrosive. The obvious remedy for immediate application, and one which, in some instances, has proven quite effective, is regularization of employment. There is a growing demand, however, for treatment to be applied at that point where emergency remedies fail—a method of relief which will be reliable and as painless as possible to all concerned and which will cure, so far as it is possible to cure, the disease and prevent its recurrence. Insurance of employment, or of wages if work can not be furnished, is the method which has found most general acceptance.

Experience with unemployment insurance in other countries has shown that the most effective plan is one which combines the benefit and preventive features, but with the emphasis on prevention. Experience with accident compensation laws, which has proven them the best promoters of safety measures, has led to the belief that the effect of a sound insurance plan should be to reduce the need for it. Any form of unemployment insurance which gains acceptance in this country will undoubtedly be based upon this fundamental idea.

The number of systematic plans for the prevention and relief of unemployment in this country is very limited. Growing interest and the accompanying demand for information on this subject have led the United States Bureau of Labor Statistics to make a survey of existing efforts in this direction, with a view to discovering more especially the actuarial bases of such plans, if any, their method of operation, their results, and the methods of regularization of employment which have made the introduction of such plans into industrial establishments possible.

In a number of States bills providing some form of unemployment insurance have been proposed, notably the Huber bill in Wisconsin.²

A number of the larger unions, especially in the needle trades, have passed resolutions and are now negotiating with employers for the institution of joint contributory plans. In two large markets joint plans have been set up.

¹This is the first of two articles to be published in the MONTHLY LABOR REVIEW showing the systematic plans now operating in the United States whose purpose is insurance against unemployment. This article deals with establishment plans, financed with one exception by the employer alone. The second article will deal with joint market plans and trade-union efforts.

²For details of this bill see substitute amendment No. 1 S., to bill No. 122 S., May 3, 1921, offered by Senator Huber. Bills have been introduced also in New York, Massachusetts, and Pennsylvania.

Various national and international trade-unions have attempted from time to time systematic relief for their members. There are now only four of the smaller unions which support such a plan, and at least two of these are contemplating giving up their plans, which are admittedly inadequate. The consensus of opinion seems to be that such action should be local and that even then it is of questionable effectiveness. The significant fact is that the burden of unemployment is borne by the workers, who, in spite of their direct interest, can not prevent its occurrence and can do little by themselves to relieve its consequences.

This article holds no brief for any form of unemployment insurance. Its purpose is to show some of the plans now in operation in establishments in the United States which purport to mitigate in any degree the unemployment hazard.

The "unemployment risk" has never been measured, and the plans now operating in certain industrial establishments have little or no basis in actuarial science. They are merely carefully worked out experiments and quite frankly acknowledged as such. Apparently they have been variously motivated, sometimes by a sense of social responsibility, sometimes by the purely selfish motive of keeping a skilled force intact, and sometimes by a combination of such motives. The essential thing, however, whatever the motive, is that this group of employers has cared enough about the problem to be willing to undertake experiments which promise something worth while.

Following are some types of plans found in operation, together with the method of their operation, and such significant results and details of accompanying methods of reduction of unemployment as it was possible to obtain.

Unemployment Fund of a Large Paper and Novelties Manufacturing Company.

THE unemployment fund of a large paper and novelties manufacturing company is a sum of money set aside by the directors when business is good in order to keep the working force intact and to tide employees over the dull periods. The aim of the company has been the prevention of unemployment in so far as possible by proper management and the mitigation of the hardships of such unemployment as can not be avoided by making reservations for contingencies beyond the employer's control. In 1916 the company set aside from its profits an unemployment fund, which was allowed to cumulate over a period of about five years before a formal plan for its use was adopted. The working out of the provisions for the administration of the fund was placed in the hands of a special committee, two members of which, chosen from the general works committee, represented the employees, and two members, chosen by the company, represented the management. By the terms of the plan thus worked out the company guarantees neither permanency of employment nor the maintenance of the regular wage rate. The plan is frankly an experiment. In the lack of knowledge on the subject the fund is provided with emphasis on its wise use and with

the frank statement that its renewal is not guaranteed. It does, however, seek to protect from hardship those workers whose earning power is temporarily reduced by reason of unemployment.

Definition of unemployment.—The term "unemployment," under this plan, is given a broad interpretation, total or even partial idleness not being regarded as necessary in order to establish unemployment within the intent of the fund. Any loss involved by the inability of a worker willing to continue employment at his normal duties, while being retained on the books of the company, is considered unemployment. Unemployment, therefore, includes not only complete lack of work, but loss, by reason of diminished returns resulting from temporary transfer of employees from one department to another, which might result in materially lowered wages. Employees, regardless of length of service, are paid for all unemployment of one-half day or over at one time. No lay-off or transfer of less than half a day at one time is considered unemployment.

When benefits are paid.—In all cases where the employee's earning power is temporarily reduced because of lack of employment, whether he is rendered idle or secures temporary employment in some other work inside or outside the factory, he is protected by the terms of this plan against any severe hardship. The company retains the right to discharge freely for stated causes. Such discharges are subject to review, however, and can not be made without due notice or pay in lieu thereof.

No compensation is paid for time the employee might have been working if he fails to accept what the management and a majority of the unemployment fund committee consider to be a reasonable offer of a job either with the company or elsewhere. At any time after six days' payments have been made to any employee during one continuous lay-off, further payments may be stopped by the committee unless the employee can convince the management or a majority of the committee that he has made reasonable effort to secure work elsewhere. This latter provision has never been utilized, however. The best workers are eager to find jobs.

All payments of unemployment compensation are made weekly, and all calculations of the amount to be paid are figured on the basis of the regular payroll week.

There is no compensation for time lost on Sundays or legal holidays, or from overtime or any time which would have been paid for at overtime rates. Likewise there is no compensation for shut-downs ordered by the civil or military authorities or for absences resulting from "a vote, decision, or action by or disability of the employees themselves, individually or collectively."

Lay-offs due to lack of work.—Any employee of the company who is not on a monthly salary or specifically employed in a temporary position is entitled to share in the fund, so long as the amount of money in the unemployment fund is in excess of \$50,000 and so long as the total charges against the fund during any 12 consecutive calendar months do not exceed \$50,000. There are no restrictions as to the length of time a worker must be employed before benefiting by the plan. Employees laid off for one-half day or over receive 80 per cent of their regular wages if they have dependents and 60 per

cent of their wages if they have no dependents.³ In the case of piece or bonus workers the average earnings during the previous six months are used as the basis for the computation. Employees on a weekly salary who are laid off are paid out of their salary and not out of the unemployment fund until their total time out during the calendar year exceeds 96 hours. After that, they receive compensation out of the unemployment fund for any wages lost on account of lay-offs even though their absences when their salaries are stopped may be due to other causes, such as sickness, etc.

So far as is possible when it is necessary to lay off workers, a large number are laid off for a short time, rather than a few for a long time.

Workers temporarily employed outside the plant.—Whether or not they have dependents, employees who secure temporary work outside are entitled to an amount equal to 10 per cent of their outside earnings plus 90 per cent of their earnings with the company, the unemployment fund being used to make up the difference between this amount and what they receive outside. This provision holds good so long as the unemployment fund does not fall below \$50,000 and the total disbursements during any consecutive 12-month period do not exceed that amount. When such employee works only part of the time, the total time is divided into two parts on the basis of 48 hours to the week. The hours worked, if less than 48 during the week, are considered as one part and figured as above stated, and the rest of the 48 hours are figured and paid as idle lay-off time at the 60 and 80 per cent rates. If the employee works outside more than 48 hours during the week, then the wages for the time in excess of 48 hours belong to the employee and are not counted either as an offset to the money due him from the unemployment fund or as a basis for the 10 per cent incentive or reward.

Employees who are laid off for over six days at a time are required to report to the company once a week in regard to their effort toward securing an outside job. Should an employee of the company accept a permanent job outside, his compensation from the fund, of course, ceases. Whenever an employee has held a job outside for six days or more, the unemployment fund committee may decide whether or not the company is warranted in continuing payments, and if so, at what rates. Any employee who makes a false statement with regard to the status of his outside employment forfeits his right to reemployment and to receive further benefits from the fund.

³Dependents are defined as follows: "Employees who have living with them children of their own under 16 years of age, wives, or husbands, none of whom are regularly employed for pay, shall be considered as having dependents. Any other employee may be considered as having a dependent, provided he (or she) can show that at least one other person besides himself (or herself) is dependent upon him (or her) for her (or his) sole means of support. Likewise, in any family or group of people living together as one family, where two or more people are solely dependent upon two or more other people and where the number of wage earners is not in excess of the number of dependents, any person who habitually contributes to the family fund the equivalent of the support of at least one other person besides himself (or herself) may be classed as having a dependent. Thus, if two brothers support two parents and themselves out of a common fund, each brother is entitled to all the privileges he would have if one brother supported the mother and the other the father. When two or more members of the family, who are jointly responsible for the support of one other person besides themselves, are laid off at the same time, then the last one laid off, or if more than one are laid off at the same time, the one who would be paid the most, may be classed as having a dependent. The unemployment fund committee shall decide all doubtful cases and arbitrate all disputes arising under this rule which can not be settled through the regular channels. All statements of the employees in regard to dependents shall be in writing and signed by the employees. Any employee who makes a false statement of fact in regard to dependency shall (1) return to the fund all moneys acquired under false pretenses and to which he (or she) was not entitled or in default thereof shall forfeit his (or her) job, and (2) forfeit the right to receive any compensation from the fund for a period of three years dating from the time of the false statement."

Transfers within the plant.—Employees who are transferred to other work within the plant are paid their full hourly wage if they are time-workers and 90 per cent of the preceding six weeks' average, if piece-workers. Preference in transfers or lay-offs is given to employees longest in the service of the company, i. e., employees longest in the service are transferred or laid off last. If the primary motive in transferring an employee from one department to another is to retain his service with the company for the benefit of the latter, the cost is considered part of operating expenses and is not charged against the unemployment fund. If the transfer is made merely to avoid unemployment, the employee's earnings on the new job are charged to operating expenses and the difference between the earnings and the guaranteed wage is made up from the unemployment fund. Inasmuch as employees without dependents have the most to gain by transfers as compared with lay-offs, it is important to avoid discrimination, and all cases where there might be grounds for prejudice or favoritism are therefore decided by drawing lots.

After an employee has been paid from the unemployment fund on the basis stated above for 30 consecutive days, the unemployment fund committee may review the case and decide whether or not further payments on this basis are warranted.

Full-time rate not guaranteed.—It will be noted that the fund does not guarantee the regular wage rate. It was felt that at least during the experimental stage the burden of employment should be shared jointly by the employer and employee and the fund used as far as possible in relieving the more acute distress from unemployment. Furthermore, this coinsurance feature has a healthy psychological effect upon the worker in that it does not deprive the individual of all responsibility as to his own financial security.

Discharges.—The company retains the right, if it deems best, to discharge on certain grounds, but discharge because of shortage of work is regarded as a last resort and to be utilized only when the shortage can not be considered temporary. Discharges may be made, without notice, for misconduct or violation of important factory rules. Such cases do not come under the unemployment fund. Discharges may be made for inefficiency, general unreliability, poor attendance, etc., upon one week's notice or pay in lieu thereof. This cost is charged to operating expenses. In doubtful cases, when inefficiency can not clearly be shown, two weeks' notice or two weeks' pay is allowed, the second week's pay being a charge against the unemployment fund. Such discharges are made, if possible, during prosperous times. Employees may be discharged for lack of work, in which case it is necessary to make a distinction between discharge and lay-off. If, when an employee is discharged, it is not expected that he will be reemployed at any time, his case would not fall under the provisions of the unemployment fund. He would be given two weeks' notice or two weeks' pay, and the cost thereof would be charged against the operating expenses of the company. Employees who, when they were employed were promised only temporary work, are discharged when the volume of work fails without expense to the unemployment fund. On the other hand, if an employee is laid off, even though for some period of time, when, on account of his experience and skill it is expected he will be reemployed when business is better, he would receive unemployment pay according to the terms of the plan.

Control of the fund.—The administration of the fund is in the hands of an unemployment fund committee of four persons, appointed annually, and upon which management and employees have equal representation. The custody and investment of the fund, however, is in the hands of three trustees, appointed annually by the directors of the company. The committee has full power to use the fund as the rules provide, with such modifications or new principles as are decided upon by the works council and the management jointly. The functions of this committee include also the study and recommendation of methods of preventing and relieving unemployment. It is further authorized to investigate the conditions which have led to unemployment and to recommend to the general works committee and the management steps to prevent its continuance. It may recommend the substitution of training and education of employees for actual unemployment. Annual reports on the use of the fund are required.

Amendments.—The plan may be altered at any time by joint agreement of the management and the works committee. The rates of compensation are changed automatically whenever the fund falls below \$50,000, or whenever the disbursements during any 12-month period exceed that sum. Likewise the entire plan would be suspended should any government under which the company is working pass a law relating to unemployment insurance. Should the fund fall below \$50,000 payments would automatically cease. No rules have been worked out for the operation of the plan under such a contingency, but it is the duty of the unemployment fund committee to keep in touch with the condition of the fund and allow sufficient time for new recommendations, should that danger point be reached.

Cost of operation.—Since 1916 the fund has accumulated approximately \$150,000. Benefits were first paid in 1920. During the four years, 1920 to 1923 (November), about \$2,800 was paid out of the fund for lay-offs, transfers, etc. This sum is less than one-half of one week's average pay roll.

The per capita cost of the plan in the year of greatest depression of the industry, 1921, was about \$8. For the year 1923 (11 months), the average cost was 37 cents per worker. At no time has the cost of the plan equaled 0.1 per cent of the pay roll. Following is a summary of available data showing the status of the fund and the cost of operation of the plan during the years the plan has been in operation. There were no data for the number of claims for benefits each year.

TABLE 1.—AVERAGE NUMBER OF EMPLOYEES ELIGIBLE FOR BENEFITS, TOTAL EXPENDITURES FOR ALL BENEFITS, AND AVERAGE EXPENDITURE PER EMPLOYEE.

Period ending—	Average number of employees eligible for benefits.	Total pay roll for eligible employees.	Total days absent. ¹	Amount available for benefits.	Total expenditures for all benefits.	Average expenditure per employee.
1920.....	2,776	\$3,335,966	(²)	\$147,237.18	\$2,469.77	\$0.80
1921.....	2,809	3,174,083	1,633	144,767.41	22,989.02	8.18
1922.....	2,950	3,354,315	55	121,778.39	1,510.15	.52
1923 (11 months).....	3,270	3,453,157	107	120,268.24	1,224.72	.37
Total.....					28,193.66	

¹ This figure does not include transfers, etc., the cost of which is included in total expenditures for all benefits.

² No data.

The successful operation of this plan and its low cost are due not only to the carefully worked-out and detailed plan of operation, but in larger part to the careful employment policy of the company and the methods of regularization of employment which have been carefully devised and applied. Seasonal employment has been looked upon as a factor largely controllable, and numerous ways of meeting the situation have been adopted. Cyclical unemployment has been planned for and met intelligently, and its unfortunate results have been mitigated to some degree.

Methods of regularizing employment.—The unemployment fund may be used to provide extra work within the plant in making up goods for stock. It was found that upon a large class of goods it was cheaper to manufacture stock and store for long periods than to pay unemployment relief for idleness. This class is determined by the ratio of labor to total cost. So this committee may set aside a part of its unemployment relief fund as a special depression insurance fund, to be used under appropriate rules to finance the making for stock of larger quantities of certain staples than could be made without the help of the fund.

Seasonal unemployment.—Seasonal unemployment in this plant is considered to be largely controllable by the employer, and by budgeting unemployment relief in the manner described above and working with its employees in testing out relief methods, the company is endeavoring to discover the principles which control the field. Although the plan is still in the experimental stage, tangible results have been secured in the control of seasonal employment by the application of six principles. These principles and the manner of their application are outlined by the company as follows:

1. Reduction of seasonal orders by getting customers to order at least a minimum amount well in advance of the season.

This has been accomplished partly by merely asking for the business, partly by persuasive salesmanship, partly by promising a greater security as to delivery, and sometimes by reducing prices to "buy-early" customers. For example, originally, box production was exceedingly seasonal. Orders would not come in in any large numbers until late in the summer, and then there would be a painful rush of work until Christmas. As a result of our modified sales policies, however, we now secure a considerable number of our holiday orders in January, and even get a fairly large proportion of orders for Christmas delivery in November and December of the preceding year. Similar results have been accomplished in the crêpe line.

2. The increase of the proportion of nonseasonal orders with a long delivery time.

These orders were either "hold order," not to be delivered until a certain date, or orders to be delivered when ready. This increase is brought about by the same methods of selling that proved effective in securing the transfer of the seasonal orders to the next seasonal period as outlined in (1) above.

3. The planning of all holiday and other stock items more than a year in advance.

The general method is as follows: Over a year in advance a detailed statement of just what holiday and other stock items are wanted is placed with our warehousing department. The warehousing department works out a minimum monthly schedule, based on the distribution of the last year's sales. Except that production must be kept up to this minimum, the producing department can distribute it as seems best.

4. The planning of interdepartmental needs well in advance. Thus the orders of our gummed label department for boxes are placed at the beginning of the year.

By the means suggested in the foregoing principles, we have converted all possible seasonal and time-limited orders into articles on which we have long

delivery time, and can thus produce according to a schedule based on production rather than delivery needs. It would, however, probably be impossible to realize benefits as fully as at the present time if we were in a trade characterized by sharp style variations; but even under such conditions it is probable that some benefits should be received.

5. The building up of "out-of-season" items and the varying of our lines so as to balance one demand against another.

For example, we are developing new box items of a sort that are not used for holiday purposes, so that we can make and sell them for delivery at times when the holiday work is light. Items, too, that are securely staple in nature can safely be made at any time for stock. It is our policy to increase up to the point of a healthful adjustment the number of such items. Measures of this type are attempts to build the normal business of a concern up toward the peak level of the busy season. They aim not at removing the peaks, but at filling up the hollows. They constitute a healthy, leveling-up process, which achieves a positive increase of the total output, at the same time that it decreases the fluctuations.

6. The distribution of these long-time orders and out-of-season staple items in such a way as to fill up periods when the work on quick delivery items is small so as to bring a more uniform flow of work.

This is really not so much a separate principle as a further step in the achievement of the benefits made possible through the principles already suggested. Besides these methods of decreasing the pressure of seasonal demands, and evening out the inequalities, we can meet seasonal employment by conforming ourselves somewhat to it. We can balance the decrease in work of one department against the surplus of another. We can transfer operatives not needed in one line to another where there is work on hand. In doing so, we made it a rule to transfer our operatives to the same off-season work each time, so that they will develop proficiency in these off-season trades. We can go a step further; we can plan to adjust the work of one department so as to use to advantage the unemployed operatives of another department. An illustration of this is found in the sample work of one of our departments. This requires little special training, and can be handled well by the box makers in their dull season. As a matter of deliberate policy, this work is always saved up for December and January, when the slack season of the box makers is at hand. These methods often work incidentally to our advantage in other ways besides those which led to their adoption. They tend toward producing a more versatile operating force, from whose numbers emergency transfers may at other times be more easily made. They also afford the workers a respite from occupational monotony. * * *

As a still further measure, we have even arranged to transfer operatives to outside industries. This course of action we resort to only in extreme cases. It has the disadvantage of relaxing the bond of connection between the employee and our company; but it has been found to preserve a certain relation of considerable advantage over complete discharge, or incurring the risk that employees whom we might wish later to take on again might be led to obtain other continuous employment during the period while we were unable to furnish them work.

Cyclical unemployment.—The methods of meeting the business depression worked out by this company are described by a member of the company, as follows:⁴

In prosperous periods we must prepare for depression. In our company we have drawn many curves of our past experiences and we pay close attention to the economic bureaus which give curves condensing the vital statistics of the present situation. In this way we were able to make the estimates, very simply and without any particular genius, that allowed us in January, 1920, when everything was overselling 60 per cent, to make adequate preparation for the depression which struck us in November. It was not difficult, because we had men in our research department whose duties were to study, watch closely, and figure where we were in the business cycle.

We study the cycle with reference to the work of several of our departments. This does not mean that we always get it right. We do not know exactly when changes are coming and do not much care within a few months. Of the great group of commodities which constitute more than half our purchases we buy to

⁴ *Annals of the American Academy of Political and Social Science.* V. 100, March, 1922, p. 103.

have smaller quantities on hand when prices are well above a normal line. We purchase a larger stock of standards when the price of any commodity is below its normal line. During war times the normal lines go to pieces, but war times are exceptional. Most of the time those lines are fairly easy to determine. When prices go much above that line, we buy from hand to mouth; when below, we buy more generously. We can not help winning in the long run on this policy. Our advertising is managed on a similar basis. The advertising appropriations are made on a five-year basis and the manager is supposed to reserve his advertising appropriation in good times and blow himself in hard times. This is the principle applied in every department of our organization.

Unemployment Sinking Funds in Two Textile-Finishing Establishments.

THE unemployment insurance plan in effect in two textile finishing plants is a part of a general partnership plan which provides life insurance, health benefits, accident insurance, and profit sharing. By the unemployment feature of the plan two sinking funds are provided, designed to make the wages of both capital and labor constant. At the end of each year the board of directors of the company sets aside from the net profits of the company, if any, a sum sufficient to raise the sinking fund for capital's minimum wage to an amount equal to 6 per cent on the invested capital. This would amount to about \$85,000. After this is accomplished, a further sum, to the amount of \$85,000, is set aside to establish a sinking fund to be drawn upon by labor when the company is unable to furnish employment. Both funds are to be raised before the division of any profits, and both bear interest at 6 per cent. Interest on labor's fund may be used, in the discretion of the board of operatives, for sick benefits, etc. Interest on capital's sinking fund is at the disposition of the board of directors.

From labor's sinking fund, known as the unemployment guaranty fund, each operative who has been on the regular pay roll of the company for 12 consecutive months receives half pay for all time lost due to employment for less than 48 hours a week, not including overtime. These payments are continued until the fund drops below \$50,000 or a figure similarly proportionate to the pay roll, when half time is paid for all time lost under 35 hours per week.

At least 24 hours' pay per week is guaranteed until the fund is exhausted. In weeks in which holidays occur the 48-hour limit is reduced by the number of hours lost by such holiday—the 35-hour limit is not affected. Six holidays are counted. The period during which benefits may be drawn is limited only by the fund.

The plan provides that at the end of the year the amount in excess of \$85,000 in the employee's sinking fund is to be distributed as profits to officers and employees of the company, it being understood that the \$85,000 bears a ratio to the pay roll and may be increased or decreased accordingly.

An operative forfeits his share of the fund if he is discharged for crime or neglect of duty (provision is made for appeals from discharges), or if he leaves without giving one week's notice or without satisfactory agreement with his foreman.

The operation of the fund is under the jurisdiction of the board of management made up of 12 members, 6 of whom are elected annually by the board of directors and 6, representing the operatives, selected by the board of operatives from among their number.

Certain important changes were found necessary in the plan. The original scheme fixed the maximum to be retained in the sinking fund at \$60,000 and provided that all employees who had been employed for two consecutive months during the year might benefit. In 1922 the maximum amount to be retained in the fund was increased to \$85,000 and employment by the company for 12 months before participation was made a requirement. The financial stability of the company demanded also that a change be made in the method of setting aside the fund. The plan originally provided that the board of directors should set aside 15 per cent of the net profits of the company, whenever such an amount should be determined, as an employee sinking fund, and a similar amount should be set aside as a fund to guarantee capital its minimum return, 6 per cent, during periods when it was not earned. The revised plan provides that the sinking fund for capital's minimum wage is to be built up to 6 per cent on its investment (this would call for about \$85,000) before the employment guaranty fund is set aside. The latter fund is set aside, however, before any division of profits.

Because of the short period during which the plan has operated the fundamental changes made in it, and the period of depression and reorganization of the companies through which it has functioned, detailed statistics of this plan are not very significant.

Since the fund is made up of surplus earnings, obviously the fund is not increased when there are no earnings. Unemployment during the slump following the peak years of 1919 and 1920 was more severe than ever before in the experience of the companies. Since they sell service, not merchandise, these companies are able to control only to a very limited extent the question of regularization, i. e., of operating or not operating.

In one plant the fund available for benefits at the beginning of 1920, when payment of benefits began, was approximately \$107,400. Three years of depression followed. During the first year of operation about 7 per cent of the total annual pay roll was distributed in benefits. By June, 1923, the fund was exhausted.

In the other plant the plan has been somewhat more successful. Payments of about $2\frac{1}{2}$ per cent of the total annual pay roll were made during the first year of its operation, between 400 and 500 operatives sharing in the distribution and receiving an average of about \$35 each. Two per cent of the total pay roll was paid out in 1921, approximately 2.4 per cent in 1922, and about 0.9 per cent in 1923. There was probably as much unemployment in 1923 as in the previous years, but because of the sliding scale upon which the fund operates, the actual drafts upon it were not so heavy.

Unemployment Compensation for Discharged Employees.

A NOVEL plan of compensation during unemployment resulting from dismissal for any cause was recently adopted by an important railroad company operating about 900 miles of road and employing approximately 14,000 workers. The scheme is a feature of a comprehensive group-insurance plan, based upon a contract between the company and a commercial insurance carrier, which became effective on January 1, 1922.

The insurance plan of this company is based on the idea that there are five major hazards against which the employee and his family should be protected if he is to reach his highest efficiency. They are accident, sickness, superannuation, unemployment, and death. The insurance plan now furnishes some sort of protection against all of these contingencies.

The company insures at its own expense, for a sum of \$500, the lives of all employees who have spent two or more years in the continuous service of the company. The company likewise bears part of the cost of such additional life, accident, or sickness insurance as the employees wish to take out in groups, thereby lowering the cost to the individual.

The provision for unemployment compensation applies to employees with 24 months or more of continuous service who subscribe for and continue to carry at least two of the three forms of contributing insurance to which they are eligible. Such employees are automatically insured at the company's expense against unemployment resulting from dismissal for any cause, in the amount of \$15 per week for a period not to exceed six weeks or for so much of that time as the employee is unable to find employment. Employees whose average annual compensation for the preceding two calendar years of service has not been more than \$1,000 are paid \$10 per week for the same period. The plan does not cover lay-offs.

The risk involved was determined by a careful analysis of the company's turnover records over a period of 10 years, the data indicating that after two years of service comparatively few men were discharged for cause. Although the company assumes all charges under this plan, employees may be said to bear a part of the cost of protection against unemployment in that they are required to subscribe to two forms of contributory insurance in order to benefit by it. The cost per employee is small, however, the amount depending upon the amounts and kinds of insurance to which he subscribes. The minimum cost per month is 84 cents. This amount covers accident insurance and life insurance to the amount of \$500.⁵

In the event of claims under the unemployment insurance the individual employee presents the facts to his former immediate superior and fills in a form giving information as to insurance carried while employed by the company, length of service, cause for leaving the service, efforts to obtain employment and results thereof, which is then analyzed by the head of the department in which the worker was employed, and if the facts are as stated the form, together with his recommendations, is forwarded to the assistant to the general manager for personnel.

Of the approximately 14,000 employees in the service of the company, about 10,600 have been in service over two years and are eligible for unemployment insurance. Over 75 per cent of all classes subscribe for some form of insurance under the plan. Since the employees longer in the service have in practically all cases subscribed to insurance, it is probable that practically all of the 10,600 are eligible for the unemployment insurance.

⁵ The cost per month of sick insurance is \$1.26, of accident insurance, 24 cents. The cost of \$500 life insurance (in addition to a \$500 policy furnished by the company) is 60 cents per month. Life insurance may be taken out to the amount of the employee's salary to a maximum of \$5,000. The cost of this maximum policy is \$3 per month. Monthly cost for life insurance varies, therefore, from 60 cents to \$3.

During the 15-month period, April 1, 1922 to June 30, 1923, 17 claims for unemployment insurance benefits were granted, or 1.1 per month, with a total cost to the company of \$1,332.86. Fifteen of the 17 claims were for the maximum period of 6 weeks. The following table shows the occupation of the beneficiary, period of service, cause of dismissal, period for which benefits were claimed and granted, together with the weekly and total benefits paid in each case:

TABLE 2.—PERIOD OF SERVICE, CAUSE OF DISMISSAL, AND UNEMPLOYMENT BENEFITS CLAIMED BY AND GRANTED TO DISCHARGED EMPLOYEES OF A RAILROAD COMPANY, APRIL 1, 1922, TO JUNE 30, 1923, BY OCCUPATION.

Occupation.	Period of service.	Cause of dismissal.	Period for which benefit claimed.	Period for which benefit granted.	Weekly benefits.	Total benefits.
Car oiler.....	July 17, 1919- May 13, 1922.	Neglect of duty.....	6 weeks.....	6 weeks.....	\$15.00	\$90.00
Clerk.....	June 25, 1917- Sept. 27, 1922.	Misuse of company's funds.	do.....	do.....	15.00	90.00
Waiter.....	1918-Oct. 16, 1922.	Dishonesty.....	do.....	do.....	10.00	60.00
Janitor.....	Apr. 17, 1919- Oct. 24, 1922.	Absent without permission	Oct. 24, 1922- Nov. 21, 1922.	do.....	10.00	60.00
Trainman.....	May 22, 1916- Oct. 17, 1922.	Making false statement.	Oct. 17, 1922- Nov. 27, 1922.	do.....	10.00	60.00
Clerk.....	Apr. 20, 1916- July 6, 1922.	Refused to obey instructions.	July 7, 1922- Aug. 17, 1922.	do.....	15.00	90.00
Crossing watchman	1914-July 7, 1922	Neglect of duty.....	July 7, 1922- Aug. 17, 1922.	do.....	15.00	90.00
Clerk.....	Feb. 25, 1918- July 4, 1922.	Insubordination.....	July 4, 1922- Aug. 4, 1922.	do.....	15.00	90.00
Stationary engineer	June, 1903-Oct. 31, 1922.	Unsatisfactory service	Nov. 1, 1922- Dec. 4, 1922.	4½ weeks	15.00	72.86
Steward.....	June 1, 1915- Feb. 1, 1923.	do.....	Feb. 1, 1922- Mar. 14, 1923.	6 weeks	15.00	90.00
Foreman.....	May 3, 1911- Oct. 17, 1922.	Insubordination.....	Oct. 17, 1922- Oct. 30, 1922.	2 weeks	15.00	30.00
Molder's apprentice.	Aug., 1918-Jan. 4, 1923.	Refusal to obey orders	Jan. 4, 1923- Feb. 14, 1923.	6 weeks	10.00	60.00
Storeman.....	Oct. 17, 1918- Jan. 3, 1923.	Selling intoxicants while on duty.	Jan. 4, 1923- Feb. 14, 1923.	do.....	15.00	90.00
Baggage agent.....	Dec. 1, 1908- Jan. 22, 1923.	Insubordination.....	Jan. 23, 1923- Mar. 5, 1923.	do.....	15.00	90.00
Trainman.....	Dec., 1917-Dec. 13, 1922.	Violation of rule G...	Dec. 13, 1922- Jan. 25, 1923.	do.....	15.00	90.00
Storehelper.....	Sept., 1918-Jan. 3, 1923.	Selling intoxicants while on duty.	Jan. 4, 1923- Feb. 14, 1923.	do.....	15.00	90.00
Engineer.....	1887-Feb. 15, 1923.	Unsatisfactory service	Feb. 16, 1923- Mar. 29, 1923.	do.....	15.00	90.00

One of the most frequent sources of irritation among discharged workers is the feeling of resentment, justified or not, against the foremen under whom they worked. The payment to a discharged worker amounts to a penalty on the company if a foreman discharges a worker for insufficient reasons. It was considered, therefore, that the responsibility of the company in assuming at least partial support if the employee had to hunt for a new job would deter the foreman from making unreasonable discharges, and that an employee, realizing this fact, would be less inclined to magnify into abuse personal incidents between himself and the foreman, which otherwise he might consider as a personal injury. The figures for claims seem to bear out this theory.

Preliminary effects of this insurance which have been noted by the company are as follows:

1. Greater care has been exercised in the investigation of cases of employees before dismissal has taken place.

2. It has had a stabilizing effect upon the organization, because of the necessity of being in the service at least two years before becoming eligible for unemployment insurance, and the knowledge on the part of the employee that if he has the misfortune to be dismissed after that period those dependent upon him will have a measure of protection until he can normally secure employment elsewhere.

3. It has resulted in subscriptions to other forms of insurance under the plan, as an employee's eligibility for unemployment insurance is dependent upon subscription to at least two of the three forms of insurance.

Employment Guaranty in a Cloth Hat and Cap Factory.

A UNIQUE plan guaranteeing payment for 48 weeks' employment each year became effective on October 22, 1923, in the plant of a middle-western firm manufacturing cloth hats and caps.

If the factory is in operation 48 weeks or more, the operative receives only his regular wages, but if the factory operates only 47 weeks, the employee will receive 1 per cent of his yearly earnings in addition to his regular wages. If the factory is in operation only 46 weeks, the employee will receive 2 per cent additional; if it operates 45 weeks, he will receive 3 per cent additional, and if it operates but 44 weeks he will receive 4 per cent additional. In case the factory is in operation 43 weeks or less each operative is to receive in addition 5 per cent of his year's earnings.

A sum equal to 5 per cent of the pay roll each week is given by the firm to the union to be kept until the number of weeks of employment for the ensuing year is determined. The entire amount is returned to the firm in case 48 weeks' work is provided, 4 per cent is returned if 47 weeks' work are given, and so on.⁶

There is a guaranty of production in this shop.

When the guaranty-of-employment plan went into effect, the union agreed to a gradual reduction of the number of employees from the then existing force of 84 to about 65, during the period of one year. The adoption of the guaranty-of-employment plan was not conditional upon this reduction in force, however.

Full-Time Work in a Paper Manufacturing Plant.

SINCE 1921 an eastern company manufacturing fine writing papers has, by guaranteeing full-time work to those of its employees who have completed five years or more of continuous and satisfactory service, attempted to remove the hazard of unemployment from such employees.

An employee who has completed such a term of continuous, satisfactory service, may, upon application, be transferred from the pay roll to the company's salary roll at an agreed salary. His application must be approved by the foreman and manager of the department in which he is working, after recommendation of two salaried workers previously enrolled, before being accepted by the company. A salary is agreed upon for a period of four weeks, payable weekly. Adjustment of his pay, which is subject to changes under any conditions affecting a general adjustment of wages, is made every four weeks on the basis of the operation for that period of time, with any overtime he has received during that period offsetting a like amount of time when

⁶ This plan has since been adopted by a second firm in the same city, and negotiations are in progress with other firms looking toward its adoption.

he might not have been employed. If, by reason of the plant not being in operation, the hours worked are not sufficient at the regular wage to equal or exceed the amount of the salary, he is paid the salary for the period, the company making up the difference. In case the plant is shut down on a regular working-day, he is expected to report for duty unless specifically excused from so doing by the foreman or production manager, and it is understood that he will do such work, other than that on which he is regularly employed, as may be mutually agreed upon by him and the foreman or production manager. Compensation for loss of time due to legal holidays is not covered.

The company aims to furnish full-time work, not merely full-time wages. If full-time wages are guaranteed, it is the belief that there is danger of the employee feeling that he is protected through some sort of gift or charity. The company therefore furnishes work whenever possible, so that when the employee receives his wages he may feel that he has earned them. It is also made plain to him that to cover the expense of paying his wages for a day or two now and then when no work is furnished he must expect to produce sufficiently when he is working to cover this extra expense.

Employees wishing to benefit by this plan enter into an agreement with the company to this effect. This agreement in no way binds the employee to remain in the employ of the company, and should the worker leave at any time, the agreement immediately becomes void, except that he agrees that thereafter he will in no way interfere, directly or indirectly, with the business of the company. The company reserves the right to terminate this agreement under any conditions which in the opinion of the company make it powerless to continue it. "It is not the intention of the company to exercise this right except in cases of serious fire or other calamity, or conditions beyond our control. Under any such conditions the matter will be fully discussed with you and termination of the agreement will not become effective except after four weeks' notice so long as you remain at work in the employ of the company."

Slack periods in this industry are due to cyclical rather than seasonal depressions for the most part, although there is some seasonal fluctuation, the peaks usually coming in the spring and autumn. The company operates 24 hours per day when it operates at all, and this continuous strain on machinery, equipment, and working space makes possible considerable employment, when the machines are not operating, by way of cleaning up, repairing, etc. Such work, which is not urgent, is left until a period of unemployment, when it can be done by those under full-time agreement rather than by hiring a larger force when the plant is in operation. Other management methods which have tended toward regularization of employment in this plant include sales coordination, adequate storage facilities, and the close cooperation of distributing agents.

The following data shows the cost of the operation of this plan since its inception in 1921. Column 3 shows the amount of wages paid to the employees who are guaranteed full time, covering the work they do on their regular jobs with the plant in operation. Column 4 shows the amount of wages paid to these same workers for doing work other than their own, when their particular job

has not been in operation. Column 5 shows the amount paid to the same group for the time when they have been excused from reporting at the mill, covering such number of hours as were not canceled by overtime hours in the settlement at the end of every four weeks.

TABLE 3.—AVERAGE NUMBER OF EMPLOYEES, NUMBER TAKING ADVANTAGE OF GUARANTEED SALARY PLAN, AND TOTAL WAGES FOR REGULAR WORK, OTHER WORK, AND FOR TIME EXCUSED.

Year.	Average number of employees.	Number of employees at end of year taking advantage of plan.	Total wages for regular work.	Total wages for other work when department or plant is not in operation.	Total wages for time excused because of no work.
	1	2	3	4	5
1921.....	501	139	\$161,899.44	\$34,190.19	\$2,941.96
1922.....	566	152	231,753.44	3,330.26	294.58
1923.....	619	186	302,201.60	4,482.46	2,696.94

It will be noted that in 1923 the number of employees covered by this guaranty is nearly one-third of the total number of employees. The total pay roll for the entire plant in 1923 was \$875,000. The company estimates that the total cost of the guaranty feature of the plan during that year was about 0.5 per cent of the total pay roll. This percentage is figured on the basis of the wages paid for time when no work was furnished, as noted in column 5, and takes cognizance of the fact that work furnished, other than the regular job of the man employed upon it, could in some cases have been done, under the usual methods of operation, by a cheaper grade of labor. Some portion of the amount shown in column 4 is therefore added to the cost of guaranty.

Employment by this company is contingent upon the signing of an individual contract stating the wage; that the working hours and rules as to overtime established by the company are satisfactory to the applicant; and that "any change made by the company in arrangement of hours, increase of wages, promotions or transfers to other departments, shall not be deemed a waiver of the contract in other respects." The applicant agrees faithfully to observe all rules of the company and to maintain the open-shop conditions of employment.

On the back of the employment application card is printed the following declaration of principles governing the employment relations in the plant:

Neutral territory.—This factory is neutral territory from which all factional differences are excluded. All the employees are expected to work together in harmony side by side for the success of the business and the well-being of all the employees.

Union recognition.—The company recognizes the right of its employees to join any craft or trade union they may wish to be affiliated with, and the fact, if known, of a person belonging to a union will in no way militate against such person when seeking employment.

Collective bargaining.—If an employee wishes to deal with the company through some one chosen to act for him, his desire will be respected, whether such a representative be an officer or agent of his union or merely a fellow workman speaking in the interest of his fellow employees.

The question of discharge, always a troublesome one and particularly so under a system of employment guaranty, is governed in the plants as follows:

Discharges.—Where an employee has given five years of continuous service to the company he shall not be discharged without the case being first submitted to the general superintendent or manager.

Where, in the opinion of the foreman, an employee has neglected his duty, the employee may be suspended, without pay, pending investigation by the general superintendent or manager.

Where the charge is incompetency and the foreman despairs of the employee ever being able to do the particular work he is on, then the employee may be suspended from the particular job he is on until such time as the general superintendent or manager or employment bureau has decided whether or not the employee can be placed in some other work better suited to his capabilities. While suspended for incompetency the employee shall remain on the company's pay roll pending decision as above.

In cases of suspension, the employee shall appear in person before the general superintendent or manager in his own behalf.

For infringement of rules or insubordination, an employee may be summarily dismissed regardless of the length of service.

The company has found this plan to work very satisfactorily in its plants, but feels that the same arrangement might of necessity be unwise for another concern or another industry. "We believe this whole question must be handled somewhat differently in different industries and different plants, with due regard for local conditions, peculiarities and needs, if it is to be handled soundly."

Guaranteed Employment.

EFFECTIVE August 1, 1923, a large soap manufacturing concern guaranteed to 5,500 employees in its four largest plants, and in offices located in 26 cities of the United States and Canada, full payment for not less than 48 weeks of employment in each calendar year less only time lost by reason of the customary holiday closings, or through fire, flood, or strike or other extreme emergency.

The guaranty is subject to three provisions:

First. In order to benefit by the employment guaranty the employee must be a participant in the company's profit-sharing plan, by which it is provided that any employee, except salesmen and traveling representatives, who has been in the employ of the company for not less than six months and who is earning less than \$2,000 a year may purchase at the market value the nearest number of full shares of the common stock of the company the total cost of which to him equals or exceeds the amount of his annual earnings. The employee pays the company in cash each year after the purchase of the stock, until it is fully paid for, not less than 5 per cent of the amount of his annual wages. Quarterly profit-sharing dividends are paid by the company on the amount of the employee's wages at the rate of 10 per cent for first year of participation, 11 per cent for the second year, etc., the rate increasing 1 per cent a year until after the eleventh year, when it remains stationary at 20 per cent. Approximately 70 per cent of the employees have availed themselves of this opportunity.

Second. The company reserves the right under this guaranty to transfer an employee to work other than that at which he is regularly employed. The original rule provided that the employee be compensated for such work at his regular wage rate. New regulations effective May 1, 1924, limit the full-wage guarantee to temporary transfers.

1. If the transfer is the result of a full or partial shutdown, or a temporary cessation of work in the department in which he is regularly employed, or an emergency in the department to which he is transferred, it shall be regarded as temporary, and the employee shall receive, during such period of transfer, his regular wage rate per hour.

2. If the cause of the transfer is the permanent termination of the particular department, or the particular job where he has been employed, it shall be officially recorded as a permanent transfer, and the employee shall receive the wage rate which prevails for the work to which he has been transferred.

By the terms of the third provision the company reserves the right to discharge any employee at any time for cause, and further reserves the right to terminate or modify the guaranty in whole or in part at any time after serving six months' notice to that effect.

If it should become necessary because of dull times to reduce the size of the force, the company states that a 10 or even a 15 per cent reduction in personnel could be made without cutting into the ranks of the old employees, because this percentage would represent the natural turnover—those who retire, leave, or are discharged.

No reserve fund has been necessary to finance the plan because there has been little additional cost involved.

The products of this company are household necessities. They are sufficiently varied to fill all household needs in this particular line. Years of skillful advertising and standardization of quality have given the products of the company recognized advantage. The result of this policy would naturally be a steady and increasing demand which would simplify the problem of regularization. Nevertheless, the company was faced with the problem of peak sales and depression largely because jobbers purchased heavily at certain times of the year, making it necessary to operate at high speed for a few months. During the periods of depression which followed while the heavy purchases were being consumed, hundreds of employees were laid off.

About three years ago the company put into effect a direct-to-retailer sales policy which brought about an even flow of business, and made it possible for plants and offices to operate at practically the same speed the year round. The company now has 26 district sales offices and distributing centers scattered from Montreal to Atlanta and from Boston to San Francisco and Seattle with widely scattered and strategically located interior distributing points.

There was, in the opinion of the company, little variation in the daily consumption of its products. This being the case, the daily production should equal the daily consumption, the variation in the demands upon the company being due to the varying size of the stocks of the company's product carried by distributors and dealers. Sales were therefore estimated for the ensuing six months and the daily production based upon this estimate. By the middle of the month the brands to be produced the following month were scheduled, allowance being made for errors due to estimates made the preceding month.

The wide differences between the daily or monthly orders received and the daily and monthly production are taken care of by adequate warehouse facilities and by controlling deliveries to the dealer so as to maintain his stock upon an approximately normal basis. Dealers were found to be quite ready to cooperate in this plan. The dealer's order is received and entered for whatever quantity he desires to buy and the company desires to sell, but his deliveries and payments upon that order are made as his trade demands the goods, and he, of course, is saved the investment and storage of unnecessary stocks.

An adequate supply of raw materials for the company is made certain by the fact that it controls in large part the supply and transportation of its raw materials. Unemployment through lack of a supply of raw materials is therefore obviated. Industrial engineers who are constantly engaged in analysis of factory operations and study of distribution and warehousing problems have eliminated unnecessary work and found methods of utilizing a full-time labor force to the best advantage.

During two months' operation of the plan 60 employees were transferred to other than their regular work and under the terms of the scheme received their previous rate of pay. The following table shows the hourly rates at which these workers had been employed at their regular work, the rates earned on the jobs to which they were transferred, and the amounts made up by the company to fulfill the terms of the guaranty:

TABLE 4.—REGULAR AND TEMPORARY HOURLY WAGE RATES AND AMOUNT OF GUARANTY PER HOUR.

Group.	Regular hourly rate.	Temp- orary hourly rate.	Amount of guar- anty per hour.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Group 1.....	61.0	47.5	13.5
Group 2.....	72.5	61.0	11.5
	50.0	48.0	2.0
Group 3.....	52.5	47.5	5.0

With respect to the adaptability of such a plan to other industries one of the members of the company says:

I do not think there is anything peculiar in the soap business that makes such a plan more adaptable to it than any other industries. I believe that in the very great majority of industries the average annual consumption is approximately the same, without much fluctuation from year to year, and that the problem of providing for the distribution and warehousing is not a difficult one to work out if study is centered upon the special industry. I believe, from the economic side, the plan is sound. With proper knowledge of the business, shutdowns should be so exceptional that the corporation could well afford to pay its wage earners during such period. The advantage of a regular production and a satisfied and permanent force of workers would easily more than offset such possible shutdown expenditures.

Saving for Unemployment, in a Clothing Factory.

A SAVINGS plan operated to encourage employees to provide for their possible unemployment has been made by a Cleveland clothing firm. Since January, 1918, this company has awarded regularity and faithfulness of attendance by its employees with a length-

of-service bonus. After the first year of service 5 cents a day is paid an employee for every day of attendance consisting of not less than 3 hours' work. This sum increases 5 cents at the completion of every subsequent year, until 30 years' service bonus has been earned or until the recipient becomes 60 years of age, when the daily award remains stationary.

The length-of-service bonus is in lieu of any pension obligation. It is optional with the worker whether or not he will deposit this amount regularly in the pension and unemployment fund, where it earns 4 per cent interest.

Whenever the larger part of the service bonus is deposited in the pension and unemployment fund account, the amount credited is available as an unemployment fund for that individual, and where unemployment due to shutdown or lay-off occurs, amounts equivalent to 50 per cent of the earnings of an 8-hour day at the average base rate may be drawn against the individual's account for any days of unemployment in excess of 20 occurring in the 6 months immediately preceding or for any consecutive days of unemployment in excess of 10 consecutive days. For this purpose a day of unemployment for an individual is any complete day of lay-off or shutdown which otherwise would have been a regular working day. Saturdays, holidays, vacation, and inventory days, not to exceed 3 days in any six months, are not considered days of unemployment. Any individual may deposit such additional amount as he may desire in addition to the service bonus. Such additional deposits, however, are subject to the conditions and considered a part of the pension and unemployment fund account.

The so-called unemployment insurance feature was not introduced until November, 1922, and the company reported on November 1, 1923, that it had not been necessary to utilize this feature up to that time.

Joint Funds in the Lace Curtain Manufacturing Industry.

A PLAN for a joint out-of-work fund was adopted by a Scranton, Pa., lace company and a local union of the Amalgamated Lace Operatives of America, on July 1, 1923. This plan was an outgrowth of an out-of-work benefit plan which the union had maintained since 1915.⁸

The object of the joint out-of-work fund, as it is called, is to guarantee a minimum wage of not less than \$15 per week to all members of the local branch union in good standing. The fund is supervised and operated by a board of managers consisting of two representatives of the company and two representatives of the union. The board of managers meets once a month, during regular working hours. Union members contribute 50 cents each week to the fund, the amount being collected by the check-off method, i. e., it is deducted from the pay roll. An amount equal to the operatives' total contribution is paid by the company. A member is not assessed unless he has earned a minimum wage of \$15 for any one week. In case an operative earns less than \$15, the benefit increases his earnings to that amount. For example, if a member earns only \$6.82 a week, \$8.18 is added from the fund to this wage to make his total earnings \$15 for the week.

⁸ A plan practically identical was adopted on Nov. 1, 1923, by another local of the same organization and a lace manufacturing company in Kingston, N. Y.

Benefits are paid for the time spent in waiting for orders, repairing of breakdowns, tieups, etc., but no benefits are paid for vacations or shutdowns or in case of a strike or lockout. There is apparently no limitation upon the number of weeks for which benefits may be paid. If required, members must report for work up to Friday noon to receive benefits.

All benefit claims are passed upon by the shop committee, which decides on or before Tuesday of each week the amount of benefits to which each member is entitled for the previous week. The committee turns in to the board of managers the names and amounts to be paid, on a printed form provided for the purpose, so that each member of the fund entitled to benefits may be paid by check on Wednesday. Any dispute between the shop committee and any member of the fund is referred to the board of managers, whose decision is final.

The fund is deposited in a national bank, and may, at the option of the board of managers, be invested in short-term United States Government bonds. No funds may be paid out unless on the signatures of two members of the board of managers, one a representative of the company and one of the union.

Amendments to the by-laws may be made at any time, if jointly agreed upon. The fund may be discontinued at the option of either party, but only upon six months' written notice to the board of managers. In such event the balance held in the fund is to be divided equally between the company and the union.

During the three months' period, July 1 to October 1, 1923, there were 69 members in the local union. Twelve claims for out-of-work benefits were made, and all were granted. A total of \$149.25 was paid out in benefits, or an average of \$12.44 per claim.

This fund grew out of the out-of-work benefit plan of this local union which was started in 1915. At that time \$500 was taken from the general fund and placed in the out-of-work fund. Each member of the local was assessed 50 cents per month to support the fund. Unemployed members were paid \$10 per week, but no man could receive more than \$36 in any one year. Shut downs and vacations were not paid for. On January 1, 1922 the assessments for support of the fund were increased to 50 cents per week. The union paid out in out-of-work benefits between March 1, 1915, when the plan was begun, and July 1, 1923, when the employer made it a joint fund, a total of \$3,687.41. Six hundred claims were awarded to an average membership of 62 persons. The dues paid in accumulated to \$5,216.50 during the period.

Unemployment Benefits in a Plant Manufacturing Varnishes, Enamels, Fillers, Etc.

THE unemployment benefit scheme in this plant is a part of the benefit association plan which covers also life insurance, pensions, disability, and death benefits. The employees of the company are organized in a mutual benefit association. All employees who have completed six months of satisfactory employment with the company are eligible for membership, which consists of three classes, designated as Class A, Class B, and Class C. Class A consists of all employees receiving \$75 or less per month, Class B consists of those employees whose wages lie between \$75 and \$200, and Class C of all

employees receiving \$200 or over. Dues of the three classes are 50 cents, \$1, and \$2 per month, respectively, collected upon the employee's authorization by the check-off method.

The affairs of the association are administered by a governing board of six members, four of whom are elected by the employees and two appointed by the management.

The dues, together with specified contributions from the company, support the life insurance, pension, occupational disability, and death benefits. (The company guarantees an annual surplus of \$2,500 for 10 years to maintain the life insurance feature of the plan.) The company reimburses the association for all benefits paid under the unemployment insurance provision.

Employees must belong to the association in order to benefit by the plan, but their contributions are not used for unemployment benefits, since the company bears all the expense of this feature.

If laid off, employees are paid unemployment benefits ranging from one-third to three-fourths of the usual wage for a maximum of 200 days in the calendar year. Holidays are included. Full benefits are paid for the first 100 days, one-half the rate being allowed for the remainder of the period. Unemployment benefits are paid from the first day's absence from any cause not within the employee's control but cease should the employee become eligible for disability benefits.

Benefits are as follows:

	Per day 1st 100 days.	Per day 2d 100 days
Class A-----	\$1. 00	\$0. 50
Class B-----	2. 00	1. 00
Class C-----	4. 00	2. 00

The unemployment feature of the plan was an extension of vacation and holiday pay. The company has always given its office employees, after one year's service, two weeks' vacation with pay and pay for holidays. On December 1, 1922, the factory employees came under this ruling. The plan to include shutdowns went into effect on October 1, 1923.

Data are available showing about six week's experience of this company. The factory was shut down for one or two days each week during the six-week period. Ninety-five employees were eligible for benefits; there were 91 claims of 9 days each, and a total expenditure of \$1,343.50, or not quite 4 per cent of the total pay roll for the period.

This company stabilized production by reorganization of production, sales, finance, and personnel. This was done with the aid of an industrial engineer. It was found possible to cut down the seasonal employment peaks to some extent and spread the work over the year, first, by soliciting export business, knowing that the foreign business would come in between the domestic seasons, and second, through national advertising, which has brought their products into use throughout the year.

As to its unemployment insurance plan, the company says:

We have found that these simple rules for taking care of our employees during periods when the factory is shut down have worked out very well and we look forward to an increased good-will because of them.

Unemployment Benefits in a Paper Manufacturing Plant.

A PLAN somewhat similar to the one just outlined operates in two associated plants of a paper manufacturing company. The welfare association which employees of this company must join if they are to receive unemployment benefits provides also for life, health, and accident insurance. Dues are 30 cents per week. An equal amount is contributed by the company. The expense of the unemployment feature is borne entirely by the company. Only employees who have been in the service of the company for one year are eligible. The company guarantees each member who may be unemployed because of inability of the company to furnish employment of some kind a sum not exceeding \$72 in any one calendar year, this insurance to be paid in such amounts as will insure the member a minimum income of \$9 per week.

In this plan the executive committee, in whose hands the management of the association is placed, is composed of five representatives appointed by the company and having no vote, and twelve members elected by the membership.

All matters of administration are placed in the hands of a standing committee on unemployment insurance, which is composed of five members elected from and by the executive committee.

There is no sinking fund, so-called, for the support of this fund, but a surplus deposited in an interest-bearing account has been accumulated.

Of the approximately 500 men on the company's pay rolls about 300 are members of the welfare association. Some of the remaining 200 are temporary employees employed in construction work, who will never become members. No unemployment benefits were paid out during 1923. This, says the company, "is largely due to the fact that whatever lay-offs were necessary were made with men who had not been with us for the necessary one-year period and therefore were not members of the welfare association."

Guaranteed Time in the Meat Packing Industry.

THE packing-house worker, while he remains on the pay roll has the assurance, subject to conditions noted below, of 40 hours' weekly pay at regular rates, with such overtime, if any, as he may earn. This plan, which was put into effect in the packing industry prior to the war, had its origin in the uncertainty of livestock receipts and the consequent variation of hours in the service of the butcher gangs, and the desirability of keeping the skilled force intact in order that there might be present, as wanted, experts on the various jobs and the work might be carried on without a break. The guaranty was extended to other departments, although in practice it rarely has application to other than the killing and cutting gangs, since the operations in other departments are more easily adjusted to the anticipated volume of work.

The worker is guaranteed six and three-fourths hours for each day called for work. The guaranty is not applicable to weeks or proportions of weeks during which the men are not called for work. The fact that an employee begins a week does not give him a guaranty of 40 hours' employment for that week. The right of lay-off

is always present. If an employee voluntarily does not work a complete day when work is offered, the guaranteed minimum wage is reduced by an amount equal to pay for the uncompleted portion of the day.

Overtime is paid at the rate of time and one-half for all time worked in excess of ten hours per day or 54 hours per week.⁹ Work done on Sundays and holidays by employees who do not regularly work on such days is paid for at the double-time rate. Employees regularly working on Sundays or holidays are paid at the straight-time rate, but they are given one day off in seven.

Proposed Plans.

RECENTLY there have been numerous suggestions for a wider application of the unemployment insurance fund idea by employers and groups of employers. Frederick L. Hoffman, of the Prudential Life Insurance Co., suggests the cumulation of a fund in each industry to meet its own inherent risks.¹⁰ J. D. Craig, of the Metropolitan Life Insurance Co., suggests that one solution of the problem might be to have life insurance companies undertake for employers a trusteeship of industrial depression reserves or unemployment premiums, and agree not only to pay to employees certain benefits under prescribed conditions, but also to assist the employer in stabilizing the business.¹¹ H. S. Dennison suggests the present need for a joint experiment by employers, through mutual insurance companies.¹²

A group plan was seriously contemplated in 1921 by a group of business men in Philadelphia who studied the possibility of the introduction of some form of unemployment insurance into their plants. Two points were considered: (1) What kind of unemployment insurance plan would be practicable for such businesses as are included in the group interested, and (2) what information a company should secure with reference to unemployment among its own employees before it undertakes to establish any permanent unemployment insurance.

With reference to the first point a study was made of plans in operation and a tentative plan based on existing ones was drawn up.

With respect to the second point, i. e., information necessary, data as to the number of employees and the amount of the pay roll were secured from the pay-roll records of four companies for a 10-year period, but the inadequacy of the data available for the measurement of the risk led to the conclusion that more accurate information on the subject was needed before an intelligent judgment as to the practicability or usefulness of such a plan could be determined and a form was suggested for the compilation of such data by each of the companies.¹³

⁹ Fifty-five hours in some plants.

¹⁰ Economic World, Jan. 27, 1923.

¹¹ Reprint from transactions of the Actuarial Society of America, v. 24, pt. 1, No. 69, p. 17.

¹² American Labor Legislation Review, March, 1922, pp. 31-36. "Depression Insurance—A suggestion of cooperation for reducing unemployment," by H. S. Dennison.

¹³ Information with respect to a well worked out plan in effect in the plant of one of the companies in this group has reached the bureau too late for inclusion in this study. Details of this plan will appear in a forthcoming issue of the Monthly Labor Review.

Sick Benefits Paid by International Molders' Union.¹

THE following statement shows the amounts of sick benefit paid by the International Molders' Union of North America from January, 1896, to June 30, 1923:

1896	\$38,511.00	1911	\$154,391.40
1897	36,720.00	1912	154,497.40
1898	37,710.00	1913	172,792.20
1899	57,465.00	1914	169,943.20
1900	102,935.00	1915	138,819.40
1901	118,515.00	1916	164,611.60
1902	134,116.00	1917	184,789.50
1903	179,355.00	1918	292,971.30
1904	198,214.25	1919	256,539.00
1905	173,946.25	1920	288,401.20
1906	176,799.00	1921	262,453.20
1907	190,177.10	1922	217,361.40
1908	159,916.20	1923 (first six months)	123,030.80
1909	120,258.65		
1910	146,110.40	Total	4,451,350.45

The amounts disbursed in sick benefits, from July 1, 1917, to June 30, 1923, aggregated \$1,523,556.80, or more than one-third of the total amount paid since January 1, 1896. The proportionately large amount for the six years ending June 30, 1923, is accounted for partly by the increased average membership of the union and partly by the provision made at the Rochester convention in 1917 for the increase of the weekly sick benefit from \$5.50 to \$7.60. At this meeting also it was decided to raise the weekly assessment per member to the sick benefit fund from 7 to 10 cents. The experience of the union with this higher assessment shows that it has taken 9½ cents of each member's weekly contribution to meet the sick benefit payments, leaving one-third of a cent of each assessment for administration costs and the accumulation of a safe surplus.

On June 30, 1923, there was a balance of \$159,830.60 for the sick benefit fund, divided as follows:

In the treasuries of local unions	\$33,701.76
In the hands of trustees	122,276.03
In the sick relief fund (a clearing house feature)	3,852.81

Recent Workmen's Compensation Reports.

Hawaii.

THE eighth annual report of the Industrial Accident Board of the City and County of Honolulu covers the year ending June 30, 1923. During that period 284 employers not previously on record made returns to the board, making a total at the end of the year of 1,475 employers. Of these, 58 were self-insured with the permission of the board. The number of accidents reported during the year was 2,752, of which 20 were fatal. There were 34 nationalities represented, 803 of the injured being Japanese, 435 Portuguese, 434 Filipino, 299 Hawaiian, 255 American, the others following in smaller groups. Of the persons involved 2,702 were males and 50 females; 1,394 were married and 1,358 were single.

¹International Molders' Journal, Cincinnati, November, 1923, Report of the Secretary of the International Molders' Union of North America to the 1923 Convention of the organization, pp. 128, 129.

Of the total, 618 accidents caused disability of less than one day, and 951 others of less than one week, this total of 1,569 being non-compensable except so far as medical and hospital services and supplies were involved. The payment of full regular wages by the employer is reported in a number of these instances. Of the remaining cases, 1,104 caused only temporary total disability, for which compensation amounting to \$35,551.73 was paid. Medical and hospital expenses for this group, and for those not receiving compensation because disabled less than one week amounted to \$38,724.42, or a total for the 2,673 accidents of \$74,276.15. Permanent partial disability succeeded the period of total disability in 59 cases, 41 of which involved the loss or loss of use of a finger or fingers, 8 of a thumb, and 6 of an eye. Payments for the total disability periods in these cases aggregated \$4,360.19, and for the permanent partial disabilities \$29,776. Medical and hospital services brought up the total benefits for these cases to \$38,658.64.

The 20 fatal cases called for compensation amounting to \$34,182.01 and funeral expenses of \$1,434. Medical and hospital expenses in the sum of \$269.25 made the total for this class \$35,886.26.

The report notes an amendment to the law eliminating the limitation of medical benefits to \$150 as the most important among the changes made during the year. The occasions for larger expenditures are few, but where the necessity arises there have been "created complications difficult of adjustment."

North Dakota.

THE Workmen's Compensation Bureau of North Dakota presents as its fourth annual report data for the fiscal year ending June 30, 1923. Insurance in this State is maintained exclusively in a State fund. During the year a special endeavor has been made to enforce the act, "which has resulted in a considerable increase in the number of risks." At the end of the year covered there were 8,548 risks in force. Employers and employees generally cooperate effectively with the bureau, the chief offenders against the act being the political subdivisions of the State, especially school districts and townships.

Premium rates were reduced in 75 classifications during the year, and increased in 14, no changes being made in the remaining groups. A 15 per cent refund dividend was found possible on all risks which had normal experience renewing on and after July 1, 1923. This excepts 38 classifications on which no dividend has been declared on account of the unfavorable experience developed. The merit-rating system in effect since July 1, 1920, has been revised, and now provides for a minimum rate of 15 per cent below the manual and a maximum rate of 24 per cent above the manual for favorable and unfavorable experiences respectively. Such rewards and penalties encourage the exercise of care, and at the same time effect a more equitable distribution of losses among the various risks.

The fund had on hand July 1, 1922, the sum of \$985,203.41, premiums paid amounting to \$355,788.22, other sources contributing to make the total income \$428,338.33, showing a total of \$1,413,541.74. Compensation payments actually made during the year amounted to \$129,895.69, medical expenses to \$68,846.07, and administrative expenses to \$54,963.12. The amount of refunds was \$22,994.50 and that of returned checks, \$2,654.33, the total disbursements being

\$280,353.71, leaving a balance of \$1,133,188.03. The amount of compensation payments increased approximately 30 per cent and medical payments 45 per cent over the previous period. The increase in the number of risks covered and the number of claims filed has occasioned an increase also in the administrative expense.

There were 137 claims dismissed, 35 of these being due to the fact that the employer was not insured at the time of the accident, while in 51 cases the accident did not occur in the course of the employment.

During the year 1,615 accidents were reported as causing temporary disability, besides 11 fatalities and 39 cases of permanent partial disability. Of the temporary cases, 701 caused disability of less than 7 days, and were therefore not compensable. The total number of claims submitted during the year was 1,654, involving a total loss in time of 42,425 days. The largest number of claims was due to injuries received from objects being handled (394), falls of persons coming next with 235 cases, and hand tools following with 205. Objects being handled called for awards amounting to \$34,306.53, falls of persons, \$30,129.28, machinery coming next with \$22,751.90 in 184 cases of claims. Total awards aggregated \$158,356.08 as against \$144,192.20 the previous year.

Great Britain.¹

THE political change with regard to the Government of Ireland affects the statistics of operations under the workmen's compensation act of Great Britain by eliminating from the British report the cases arising in Ireland. This affects the strict comparability of figures of 1922 and later years with those for preceding years, since "it has not been possible to separate and exclude the Irish cases." It is thought, however, that this will not affect "to any serious extent, the comparison of the figures for 1922 with those of previous years."

As is generally known, the principal statistics of compensation cover seven groups of industries: Shipping, factories, docks, mines, quarries, constructional work, and railways. Some important groups are therefore not represented; for example, building, road transports, and agriculture. In these seven groups returns were received in regard to 138,718 employers. The average number of employees under the act in these seven industries was 7,205,609, the total number of cases in which compensation was paid being 392,912. The amount paid for fatal cases was £546,889 (\$2,661,435, par); and for nonfatal cases £5,948,839 (\$28,950,025, par), the total being £6,495,728 (\$31,611,460, par). The average payment in death cases was £220 (\$1,070.63, par), as compared with £217 (\$1,056.03, par) in 1921 and £161 (\$783.51, par) in 1914. There was a large increase in 1922 over 1921 both in the number of cases and the amount of compensation paid. For the earlier year 285,746 cases were reported, the increase in 1922 amounting to 37.5 per cent, while compensation increased 17.9 per cent. It must be kept in mind that the figures for 1921 included Irish cases as well, so that in 1922 the increase was an excess in Great Britain alone over the earlier total for Great Britain and Ireland.

¹Great Britain. Home Office. Statistics of compensation and of proceedings under the workmen's compensation act, 1906, and the employers' liability act, 1880, during the year 1922. London, 1923. Cond. 2007. 29 pp.

The increases were due principally to the nonfatal cases, and it is apparent that the increased number of accidents did not entail a corresponding increase in compensation costs. The increase in the number of nonfatal cases in 1922 was 37.8 per cent and in fatal cases only 4.4 per cent. The increases took place almost entirely in the mining industry, where the accident rate per thousand was 192 as against 102 in 1921, 116 in 1920, and 123 in 1919. The "charge per person employed" i. e., the amount of compensation paid per person employed, was 61s. (\$14.84, par) in mines, having advanced from 29s. 6d. (\$7.18, par) in 1919.

For the other groups of industries the accident rate per thousand persons employed and the "charge per person employed" were, in 1922, respectively, shipping 23, and 16s. 9d. (\$4.08, par); factories, 27 and 8s. 9d. (\$2.13, par); docks, 82 and 36s. 10d. (\$8.96, par); quarries, 63 and 22s. 10d. (\$5.56, par); constructional work, 52 and 18s. 11d. (\$4.60, par); railways, 30 and 11s. 3d. (\$2.74, par); total for the seven industries, an average rate per thousand of 55 and an average charge per person, 18s. (\$4.38, par).

As noted in the MONTHLY LABOR REVIEW for February, 1924 (pp. 184, 185), the British workmen's compensation act was considerably amended in 1923, though the effects of this amendment are, of course, not apparent in the above statistics of proceedings. In that account reference was made to the consideration given by the commission of inquiry to the subject of compensation insurance, and to the agreement arrived at between the Government and the representatives of the accident insurance companies for certain economies to be observed by the companies, with the understanding that there should be no governmental interference with their conduct of the business. The commission on premiums was fixed at a reduced scale. The report under review points out that the figures for "charge per person employed" given above "represent only the actual amount paid to workmen or their dependents, and not the total charge on the industries in respect of compensation." Other items are administrative costs, medical and legal costs of employers and companies, and reserves and profits. The report continues: "In the case of the insurance companies, these have constituted a large proportion of the total charge."

Returns furnished by the companies to the board of trade with regard to employers' liability insurance business for 1922 show an income from premiums, after making the necessary adjustments as to unexpired risks, of £6,490,478 (\$31,585,911, par), and from interest and dividends on reserves £200,149 (\$974,025, par), or a total income of £6,690,627 (\$32,559,936, par). "Of this sum, however, only £2,974,602 (\$14,475,901, par), or 44.46 per cent, was allocated to payment of compensation (including legal and medical expenses incurred in connection with the settlement of claims). Of the balance, £2,186,123 (\$10,638,768, par), or 32.68 per cent, was spent in payment for commission and expenses of management, while £1,582,715 (\$7,702,283, par), representing 23.65 per cent of income, was set aside for profits." Commissions formed 10.43 per cent and management expenses 22.25 per cent of the total. The figures given show an excess of outgo over income, which is accounted for by the transfer of £52,813 (\$257,014, par), or 0.79 per cent, from additional reserves.

It should be noted that these figures apply to the whole of the employers' liability insurance business of the companies, and not merely to the seven industries for which statistics are given above. Limiting estimates to these seven classes of industries, it is said that the total charge for compensation therein in 1922 can hardly have been less than £8,500,000 (\$41,365,250, par). In further discussing the subject of insurance, and the proportion of the amount collected paid out in benefits, the report continues:

The proportion of 44.46, however, compares favorably with the figure for the preceding year, when the proportion of income allocated to payment of compensation was only 35.95 per cent. For the future a further and greater improvement will be insured by the formal arrangement which was recently negotiated between the home office and the Accident Offices Association for the purpose of limiting the charges to employers in respect of employers' liability insurance. It is provided by this arrangement, the full terms of which have been published as a parliamentary paper, that the proportion which the total amount paid by the offices constituting the association (which includes almost all the big accident insurance companies) in respect of compensation or damages for injuries to workmen (including reasonable medical and legal expenses in connection therewith) bears to the total amount received as premiums by these offices, shall for each of the years 1924, 1925, and 1926 be not less than 60 per cent and shall for any subsequent year be not less than 62½ per cent, or such other proportion, not being less than 60 per cent, as may be agreed between the secretary of state and the association.

Shall the Oregon State Insurance Fund be Made Competitive?

ON DECEMBER, 8, 1923, the Governor of Oregon appointed a committee of 15 persons representing agricultural interests, industrial employers, and industrial employees to consider questions affecting the State workmen's compensation law. At the first meeting of this committee the State industrial accident commission was requested to answer an inquiry made by one of the committee "as to the effect of a change in the Oregon workmen's compensation law providing that all settlements made by casualty companies be approved by the industrial accident commission."

The commission prepared a reply to this inquiry, assuming that the question was based upon the idea that the law, which now provides an exclusive State fund, should be changed so as to recognize insurance by both insurance companies and the State fund. In this response, "the commission has endeavored to use only data as to the actual experience developed in the field of workmen's compensation in other States, particularly States in which the State funds are competitive and where settlements by insurance companies are subject to the approval of the accident commissions." Taking up first the effect of such a change upon the employers, the commission stated that the principal result "would be an increase in the cost of workmen's compensation insurance," assigning as reasons for its statement that the cost of insurance in the State fund would be increased; that—

- (a) Solicitors would have to be employed, as in other competitive fund States;
- (b) The fund would be conducted practically as an institution separate from the commission, for the latter would be required to pass impartially upon settlements made by the fund, as well as private companies;
- (c) The overhead expense would be greater upon a smaller volume of insurance;
- (d) The fund would have to contend against a campaign by private companies to destroy it.

The present cost of insurance in the State fund would also be increased if insurance was secured from private companies because "the country over, the nonparticipating private insurance companies use approximately four times as much for expenses as our State fund"; and also because of the additional work involved in the system suggested by the question.

These brief statements were enlarged upon by a review of the facts existing in the State of Oregon as compared with adjacent States which have a competitive system, and also by extracts from the "Lockwood report" on the situation of compensation insurance in New York. The New York insurance report of 1923 was also quoted in its statement that "nonparticipating stock companies the country over use 44.58 per cent of their premium income for expenses," while in Oregon a nine-year record shows slightly less than 9 per cent so used.

The experience of a large company, the Employers' Liability Assurance Corporation, as set forth in the New York insurance report of 1922, showed an expense ratio of 42.50 per cent. Comparing this with the benefits paid or awarded in Oregon during the nine years discloses a saving of \$8,189,897 to the employers of the State. This saving "by the Oregon fund, as compared with the experience of this one company, will also serve to show the incentive for the campaign to destroy the present compensation act, and for the campaign conducted against State funds in other States." While the insurance company collected \$1.74 for each dollar paid to the injured, the Oregon fund provided one dollar in benefits for every \$1.10 collected.

The Lockwood report showed premium rates charged by stock companies in New York of \$28.90 for each \$100 of pay roll for steel erection and \$12.16 for carpentry. "The corresponding base rates in Oregon are, respectively, \$8 and \$3.25, with the net cost somewhat less by reason of distribution of surplus."

Another item less frequently emphasized is the saving effected by interest earnings, interest and penalty from delinquent employers, "and other smaller similar items." In Oregon these are returned to the accident fund and serve to reduce the cost to employers, the amount accrued in nine years being somewhat in excess of \$400,000. Mr. Alfred M. Best, "one of the leading insurance experts and statisticians in the United States," has testified that "experience has shown that there is a very large profit in this liability reserve that the law has required to be set apart for extra safety. Of this reserve approximately one-half is profit which is nowhere shown upon the books of the company," large earnings being held by the companies and used for their own purposes, instead of serving to reduce insurance costs.

Taking up the effect upon workmen and dependents, the commission summarized its conclusions that a change would be injurious to them—

- (a) Through the practice of stock companies to settle with them for less than the amounts to which they are entitled by law;
- (b) By reason of being deprived of compensation through the failure of insurance companies;
- (c) Through loss of compensation by failure of employers to secure insurance;
- (d) From the great number of appeals prosecuted by insurance companies on technical grounds;

(e) Because of lack of assistance in securing the greatest physical restoration possible; and

(f) From the fact that private insurance companies do not provide for vocational rehabilitation.

Detailed illustrations are given, besides various conclusions arrived at by other investigators. Of 114 cases involving 19 different insurance companies in New York, settlements made by one corporation in 12 cases showed payments by the company intended to be final amounting to \$1,307.40. Investigation by the State commission added \$4,581.40 to these awards, 2 cases also indicating additional compensation to be paid in the future on account of continued disability.

The stability of the companies as compared with the State fund is illustrated by the testimony of a New York official to the effect that "a good many stock companies have 'busted up' and lost other people's money in these lines." Mutual companies generally pay up, but "I know of a good many stock companies that have not"; while a second official stated that "millions of dollars have been lost through insuring in these same lines with stock companies."

The excessive number of appeals to courts is indicated by the California experience of 87 appeals per million dollars of pay roll by insurers in the State fund, while the average number for other carriers was 209.

A paragraph is given to the question of the effect upon the public, the commission saying that "in the proper solution of this problem the taxpayers of Oregon have a direct interest, for they in the last analysis foot the bills."

The pamphlet closes with a submission of general statements taken from the New York experience and investigations, sustaining the attitude of the Oregon commission in favor of an exclusive State fund with no concession to the stock companies.

Old-Age and Invalidity Pensions of French Miners.¹

A FUND for the payment of old-age and invalidity pensions to miners was established in France by a law passed June 29, 1894. This law has been the subject of various amendments, the most recent ones being contained in a law dated December 24, 1923, which, in addition to other changes, increases the amount of payments allowed by the act of February 25, 1914. The principal provisions of the miners' retirement law, as amended, are as follows:

The fund is administered by a council composed of representatives of the State, of the mine operators, and of the workers. It is supported by taxes upon wages, a tax paid by employers, and contributions of the State. The wages of all miners are taxed, the amount being fixed each year by the administrative council, but the amount of this tax may not exceed 2½ per cent of the wages. The employers are required to pay an amount equal to that paid by the workers, and the State contribution varies but can not be less than 1 per cent of the total amount of wages paid.

¹Comité Central des Houillères de France, *Législation Minière et Législation Ouvrière*, Paris, 1920, pp. 84-95, 101-103, and *Circulaire No. 5684: Retraites des Ouvriers Mineurs*, Paris, December, 1923, 6 pp.

Employees to be eligible for retirement must be 55 years of age and must have had at least 30 years of service in the mines. In computing the working time of employees the average number of days worked together with the time lost because of injury or sickness for which compensation has been paid must amount to 264 days a year. When this average has not been reached the number of years worked will be determined by dividing the total number of days of work and sickness by 264.

The minimum amount of pension paid to workers fulfilling the requirements as to age and length of service is fixed at 2,000 francs (\$386, par). Allowances or pensions paid to workers not having worked for the full period of 30 years can not be less than 600 francs (\$115.80, par) for 15 years' service or more than 1,500 francs (\$289.50, par) for 29 years' work in the mines.

Widows whose husbands at the time of death were receiving a pension, and who are 55 years of age, or when they reach that age, are entitled to half the amount of pension received by their husbands. Widows of miners who died before the age of 55 but who had been employed for 30 years receive a pension of 1,000 francs (\$193, par) and for those with less than this service half the amount of pension to which the worker himself would have been entitled. Allowances are also made for orphans under 16 years of age. In case of divorce or separation from the former employee, a widow may be deprived of the pension, and in case of remarriage the payment of the pension ceases although a lump-sum payment equal to three years' pension is paid.

Miners who, after having received the assistance of any insurance society for six months, have a permanent partial disability amounting to two-thirds of their working capacity and have completed 10 years' service in the French mines, representing at least 2,640 days of labor or of sickness for which compensation was paid, and if there were at least 500 days of effective labor in the two years preceding their incapacity are entitled to the following payments: During a period of five years beginning at the sixth month of the period of incapacity for work, a monthly allowance of 125 francs (\$24.13, par) shall be paid and at the expiration of this period an annual pension of 1,500 francs (\$289.50 par). Persons who are incapacitated because of injuries or sickness which are covered by workmen's compensation or who are incapacitated through their own fault or crime are excluded from participation in these benefits.

An English Unemployment Insurance and Profit-Sharing Plan.

THE English magazine, *Industrial Welfare*, in its issue for January, 1924, gives some details concerning a welfare plan recently inaugurated by Cadbury Bros., which combines profit sharing with a sort of insurance against unemployment in the form of short time. The first step in the plan was the establishment of a welfare fund which was worked out in an original manner. Having calculated what number of shares would, for the three years ending June 30, 1923, have produced an average annual dividend of £50,000 (\$243,325, par), the firm practically devoted such a block of stock to

the purposes of the welfare fund. Henceforth "the average annual dividends which would have been paid on such a block of shares for the three years prior to every June 30 will be paid into the welfare fund," and to this will be added whatever amount is needed to pay the income tax, so that the entire fund may be used for welfare purposes.

Unemployment benefit is to constitute the first charge upon this fund. Beginning with December, 1923, every employee is entitled to benefit if he is unemployed for more than six hours in any week through lack of work. The purpose of the firm is to relieve its employees from the losses involved in short-time work, whether due to seasonal fluctuations or to such industrial depressions as England is now experiencing, and it considers that this plan amounts to the guaranty of a minimum week.

Any part of the fund not absorbed by short-time benefits will be devoted to a prosperity sharing scheme and will be divided among the workers in proportion to the shares each holds. The shares are to be allotted as follows:

Men and women over 21 and under 24 years of age, with 5 years' service and over, 1 share.

Men and women of 24 years of age and over, with over 5 but less than 9 years' service, 1 share.

Women of 24 years of age and over, with 9 years' service and over, 2 shares.

Men of 24 years of age and over, with 9 years' service and over, 3 shares.

An important feature of the plan is that the fund is not dependent upon profits reaching any set figure. As already stated, a certain amount of stock is dedicated to this purpose, and its earnings go to the welfare fund whether the general profits are large or small. The fact that the yearly contribution is to equal the average dividend for three years past introduces a stabilizing factor, making it certain that a bad year can not wipe out the fund. Another highly important feature of the plan, from the employee's standpoint, is that the allotment of shares, and consequently the division of the fund, is based not on wages, but on age and years of service, so that the low-wage groups fare as well as the more highly paid.

The scheme is to apply to all the whole-time employees of the firm throughout England, except those who already receive commissions based on sales or profits or both, and is to be administered by a committee formed of representatives of the board of directors and of the workers.

Recommendations of British Imperial Economic Conference Respecting Workmen's Compensation.

WORKMEN'S compensation was one of the subjects which came up for discussion during the sessions of the Imperial Economic Conference¹ held in London in October and November, 1923. It was pointed out that since 1911 there had been a great development of legislation on this topic in the different parts of the Empire, and that each legislature had worked out the problem

¹Great Britain, Imperial Economic Conference, Record of proceedings and documents, London, 1924, Cmd. 2009, 620 pp., and Summary of conclusions, London, 1923, Cmd. 1990, 20 pp.

independently. As a result, there were such wide diversities of practice in the separate dominions that it was hardly possible to secure, at this date, any general uniformity throughout the Empire. On a few points, however, this might be obtained. It was felt that it was especially desirable to secure such uniformity in regard to non-resident workmen, aliens, and seamen, "so that at any rate within the British Empire there should be similarity of treatment for non-residents and seamen, and also similarity of treatment for foreign workers where other countries reciprocated." A committee was appointed to consider and report on the matter, which recommended the adoption of the following resolutions:

RESOLUTION I.—*Nonresident workmen.*

That the conference, taking note of the existing restrictions in the workmen's compensation laws of certain parts of the British Empire on the payment of benefits to workmen and their dependents on the ground of nonresidence in the State in which the accident happened, and having regard to the tendency of such restrictions to discourage movement within the Empire, is of opinion that no British subject who is permanently incapacitated, and no dependent of a British subject who has been killed by accident due to his employment in any part of the Empire should be excluded from any benefit to which he would otherwise be entitled under the workmen's compensation law of that part of the Empire on the ground of his removal to or residence in another part of the Empire.

RESOLUTION II.—*Seamen.*

That the conference, having had its attention drawn to cases where British sailors injured by accident while serving on ships registered in some part of the Empire have had no claim to compensation owing to the law of that part of the Empire being restricted, in its application to seamen, to accidents occurring within territorial waters or other limited area, is of opinion that the government of any such part of the Empire should insure that the benefits of its compensation law will extend to all accidents to seamen serving on ships registered within such part of the Empire wherever the ship may be when the accident takes place. And furthermore the conference invites the government of any British colony or protectorate where there is a register of shipping but where legislation giving compensation rights to seamen does not at present exist, to consider the adoption of such legislation.

RESOLUTION III.—*Aliens.*

That the conference, taking note of the disabilities imposed under the workmen's compensation laws of certain foreign countries on British subjects residing within those countries and their dependents, invites each government of the Empire, regard being had to its own particular conditions, to consider the possibility of adopting in workmen's compensation legislation the principle of reciprocity—that is, that the benefits of such legislation should be accorded to subjects of foreign countries upon the condition that and to the extent to which such foreign countries accord reciprocal treatment to British subjects.

The resolutions as a whole were adopted by the conference, although note was made of the fact that in some of the Dominions such matters as workmen's compensation fall wholly or partly under the jurisdiction of the Province or the State, and are to that extent beyond the control of the dominion government.

LABOR LAWS AND COURT DECISIONS.

Labor Law of Durango, Mexico.¹

By ETHEL C. YOHE, OF THE UNITED STATES BUREAU OF LABOR STATISTICS.

TO GIVE effect to article 123 of the Federal constitution of Mexico the Legislature of the State of Durango enacted a labor law which was signed by the governor of that State October 14, 1922, and became effective three months after promulgation. This law covers a great variety of subjects, including labor contracts, rights and obligations of the contracting parties, hours and wages, private employees, apprentices, shop rules, strikes and lockouts, trade-unions, conciliation and arbitration, labor inspection, workmen's compensation, and safety and hygiene regulations.

Contracts of Employment.

A CONTRACT of employment is defined in the law of Durango as an agreement by virtue of which one person or group of persons renders services to another person or company. The law covers individual and collective agreements and includes contracts for work in agricultural, industrial, and mercantile establishments and in mining enterprises. It applies also to services rendered to the State and municipal governments by their employees. According to this law any individual of either sex over 16 years of age may make a personal contract for services or may make a collective contract, either through a labor organization or by a person authorized by law to represent him.

The contract is individual when it is made between an individual or his legal representative and an employer. A collective contract is one made between an employer or company and a group of workers or a representative of the group. Contracts may be verbal in the following instances: (1) When the duration of service does not exceed six days, (2) when it treats of domestic service which does not require continuous physical effort, and (3) when the services do not endanger the life or health of the laborer.

In the following cases, however, the contract must be in writing: (1) When the duration of the work exceeds six days, except in the case of domestic servants; (2) when the services endanger the life or health of the laborer even if the duration is less than six days; (3) when the services are to be rendered outside of the State; (4) when the agreement is made outside the State for work within the State; (5) when the agreement is for the work of minors under 18 years of age; (6) contracts of partnership.

The law requires that the following be specified in all written contracts: (1) The names, ages, professions, and domiciles of the

¹This is the seventh of a series of articles on labor legislation in the Mexican States, the six previous ones having been published in the December, 1922, August, September, November, and December, 1923, and the February, 1924, issues of the MONTHLY LABOR REVIEW. The labor law of Durango was received by this bureau too late to be included in the previous studies; it is handled topically as were the other State laws.

contracting parties; (2) the kind of service to be rendered; (3) the duration of the contract, specifying the date on which it is to begin and whether it is for an indefinite period less than one year or for a specified piece of work and for a fixed sum; (4) the length of the working day, the weekly rest day, and the salary or wages the laborer is to receive and whether they are fixed by unit of time, by unit of work, or in some other manner; (5) the place or places where the work is to be performed. If the place of work is not specified in the contract the laborer shall not be obliged to work in places which are more than 4 kilometers (2.5 miles) from his residence. The written contract is to be made in duplicate, one copy to be kept by each of the parties, and is to be signed by the contracting parties before two witnesses.

Duration.

Contracts may be made for a fixed period or for a specified task, but not for an unlimited time, those in which the duration is not stated being considered to be for one year. If the worker continues to render service after the expiration of the contract without making a new contract, it will be considered extended indefinitely, but may be terminated on one month's notice by either party.

Termination.

Contracts may be terminated under the following conditions: (1) Upon the conclusion of the work for which the contract was made; (2) at the end of the contract period; (3) by mutual consent; (4) upon the death of either of the contracting parties; (5) because the employer becomes bankrupt or goes out of business; (6) on account of bad business conditions, necessitating the discharge of one or more employees before the end of the contract period, in which case the employer must give such workers a 30-day notice in writing; (7) because of a criminal act committed by the worker which renders him liable to the law; (8) on account of force majeure.

Grounds for discharge.—When an employer discharges a workman for any of the reasons specified in the law he is not liable to damages, nor is he required to pay the usual indemnity for unlawful discharge—the equivalent of three months' wages. The following are the grounds for discharge specified in the law: (1) When the worker does not render the services agreed upon in the contract, or misrepresents his qualifications, skill, etc.; (2) when he fails to obey the orders of the employer or his representative, either because of ignorance or from bad faith; (3) when the worker reveals trade secrets; (4) when he comes to work in an intoxicated condition, violates the shop regulations more than three times in one month, or causes damage or loss to the employer's interests through negligence, disobedience, or ignorance; (5) when he refuses to render service in case of accident or imminent danger; (6) when by his imprudent acts he jeopardizes the safety of the work place or of his fellow workers.

When worker may quit before expiration of contract.—A laborer may quit his employment before the expiration of the contract without being held liable for breach of contract for the following reasons, specified in the law: (1) If wages are not paid as stipulated in the contract; (2) if the worker feels that his health is being under-

mined because of the unhealthful conditions of the work place; (3) if the employer requires him to do work other than that stipulated in the contract; (4) if the employee is obliged to work longer than the legal workday without increased wages; (5) because of dishonesty on the part of the employer; (6) if the employer, or his subordinates with his consent, maltreats the worker.

Employer's liability.—An employer will be required to pay the worker an indemnity equal to three months' wages in the following cases: (1) If he has failed to give the employee a 30-day notice in writing of his intention to discharge him because of straitened circumstances in his business; (2) when the employee is discharged without justifiable reason; (3) when the worker quits before the expiration of the contract with a justifiable reason in the opinion of the board of conciliation; (4) when the employer refuses to submit to the board of arbitration differences which arise between himself and his employees. When an employee of the State or city is discharged for any reason except inability to perform the service, the State or city government shall pay him three months' wages, even though the discharge may be for political reasons.

Verbal Contracts.

The lack of a written contract does not deprive the worker of his right to recover wages earned nor release the employer from liability for accidents and occupational diseases suffered by the worker during the performance of his work. On the other hand, the lack of a written contract deprives the employer of all action against the worker, and the president of the board of conciliation and arbitration shall impose upon the former a fine of from 10 to 100 pesos (\$4.99 to \$49.85, par).

Contracts for Employment Outside of Mexico.

Contracts made by a Mexican with a foreign contractor or company for work outside of Mexico must be authorized by the central board of conciliation and arbitration, by the municipal authority, and viséed by the consul of the country to which the worker is going. The law requires the contractor to bear the expense of repatriating the worker.

Contracts made outside the State of Durango for employment within the State are subject to the provisions of this law.

Certain Provisions Void.

The law declares certain provisions not binding even though included in the contract. These provisions are as follows: (1) Stipulations for more than an 8-hour day, for more than 7 hours for night work, or for more than 6 hours for a minor; (2) those which specify a lower wage than the minimum wage fixed by the district board of conciliation; (3) those which provide for a longer period than one week before the payment of wages or for payment of wages with promissory notes or checks, or which require the purchase of articles of consumption in specified stores when the work is carried on in a place which has its own market; (4) those which permit a discount, fine, or retention of wages on any pretext or the discharge of the

employee at any time; (5) those which, even indirectly, require the worker to commit an immoral act, or require him to resign from his labor union, or deprive him of his civil or political rights; (6) those which constitute a waiver by the workman of the right to compensation for industrial accidents or occupational diseases, or of any right which the law establishes for his benefit; (7) those which attack the dignity of the individual.

Employers' and Workers' Organizations.

THE law contains provisions granting to both employers and workers the right to combine in defense of their respective interests. An employers' association and a trade-union, according to Chapter IX of the law, is a group of employers and workers, respectively, combined exclusively for the study, development, and defense of their common interests. The law stipulates that employers' associations or trade-unions which are organized according to the following provisions of the law shall be regarded as legal persons apart from their members: (1) Employers' organizations must have at least 5 and workers' organizations 20 members; (2) such organizations must be registered. One copy of the by-laws shall be filed with the executive of the municipality, another sent to the board of conciliation, and a third to the central board located at the State capital. The by-laws must contain the name, headquarters, object of organization, conditions of membership, mode of collection and administration of funds, and duties of the executive committee and manner of choosing its members. Once the employers' association or trade-union has been organized and registered, its rights and obligations as such shall be recognized.

Prohibited Acts.

Provisions in the law specifically prohibit the employers' associations and trade-unions from doing any of the following acts: (1) Admitting to membership one who is an agitator or engaged in spreading seditious propaganda; (2) admitting to membership workers with entirely different trades from that of the other members; (3) coercing any one to join the organization; (4) engaging in political or any other activity outside the sphere of the organization. For doing any of the things specifically prohibited the employers' associations or trade-unions may be penalized by having their names stricken from the register after a hearing.

Labor Disputes.

THE law recognizes the right of workmen to strike and of employers to suspend work in defense of their interests.

Strikes.

When lawful.—The law defines lawful strikes as those which are peaceful and for the purpose of securing a balance between the rights of labor and those of capital. Provisions in the law specify the following definite objects for which strikes may be called: (1) To obtain a modification of the contract for the general benefit of the workers; (2) to compel the employers to modify the mode of payment and the

hours of labor. When a strike is imminent the workers must request the board of conciliation and arbitration to attempt a settlement, and if this fails must give a 10 days' notice to the employer and the board of their intention to strike, stipulating the cause.

When unlawful.—The law defines unlawful strikes as (1) those the cause of which is nonfulfillment of individual or collective employment contracts; (2) those in which a majority of the strikers engage in violent acts against person or property; (3) those in establishments and services upon which the Government depends in time of war.

Hiring of strike breakers prohibited.—The law prohibits employers from hiring other workers to replace those on strike pending the settlement of a lawful strike.

Termination.—Strikes may be terminated by private agreement between the employers and workers, or by the decision of the central board of conciliation and arbitration.

Effect of award on contract of employment.—The provisions of the law concerning the effect of an award of the board of conciliation and arbitration on the contract of employment are as follows: (1) If the award is favorable to the employer, the contract is terminated without obligation on his part; (2) if it is favorable to the workers, the contract will continue with such modifications as the board directs, in which case the contract may be terminated if the employer pays the strikers an indemnity equivalent to three months' wages; (3) if the award is not wholly favorable to either party, the contract continues and the employer is not required to indemnify the workers if the contract is terminated.

Penalties.—Promoters of violent strikes and those who commit violence against person or property will be liable under article 890 of the Penal Code in addition to being liable for crime committed collectively. Workers will be held liable for infractions of the law apart from the collective act or participation in a collective violation of the law.

Shutdowns.

When lawful.—Shutdowns are considered lawful when overproduction necessitates the suspension of operations in order to maintain prices at a profitable level, the previous approval of the board of conciliation and arbitration being required. Employers shall give the workers 10 days' notice of their intention and the reasons for the shutdown.

When unlawful.—Shutdowns will be unlawful in the following cases: (1) For the purpose of reducing the wages of employees; (2) to avoid granting their lawful demands; (3) for the purpose of dismissing workers who were active in a strike; (4) nullify the effects of a strike; (5) when the business is one which affects public health and order; (6) for the purpose of obstructing the collection of a tax or of causing the revocation of a law.

Employers may not discharge the workers and likewise the workers may not quit their employment for six months after a conciliation award, except for willful failure to pay wages or on account of grave ill-treatment.

Penalties.—If an employer, without awaiting the decision of the board of conciliation, suspends operations in mines, factories, shops,

offices, commercial or business establishments, the mayor shall impose upon him a fine equivalent to one day's wages of the entire personnel for each working day that the business remains closed, which shall be deposited in the municipal treasury.

Settlement of Labor Disputes.

CHAPTER X of the law provides that differences and disputes between employers and workers shall be submitted for settlement to the local board of conciliation in a municipality, which is subordinate to the central board of conciliation and arbitration.

Organization of Conciliation Boards.

Local boards.—The municipal boards of conciliation shall consist of five members, two representatives each of employers and workers and the same number of alternates, elected by the group which they represent, and the presiding officer of the city council who shall be ex officio president of the board. A member of the city council shall be appointed by the municipal authority to act as alternate for the president of the board. A member of the board must have the following qualifications: (1) He must be at least 25 years of age; (2) he must be able to read, write, and count; (3) he must be a Mexican citizen of good habits and, in the judgment of the electors, must have had the necessary experience.

Central board.—The central board of conciliation and arbitration shall be composed of 10 members, five representatives each of employers and workers and their alternates. The government representative, who acts as president of the board, shall be appointed and can be removed by the governor of the State.

The members of both boards are elected for one-year terms.

Powers and Duties of Boards.

Among the powers and duties of the boards are the following: (1) To fix the minimum wage in mercantile establishments, factories, and agricultural, industrial, and mining enterprises according to the needs in each district; (2) to receive oral or written complaints of employers and workers; (3) to decide disagreements arising between employers and workers by conciliation or arbitration; (4) to receive and pass on all labor contracts; (5) to intercede in strikes and shut-downs; (6) to consign employers and workers guilty of criminal acts to the proper authorities; (7) to pass on all works regulations of workshops, business enterprises, etc., and decide any questions as to the application of these regulations; (8) to enforce this law and its provisions. In fixing minimum wages in mercantile establishments, factories, and agricultural, industrial, and mining enterprises, the municipal boards shall take into consideration the importance of the work, the economic conditions in the municipality, and other circumstances, and the establishments concerned are obliged to furnish any information needed. In settling disputes between employers and workers, conciliation boards shall first attempt to reconcile the parties concerned. If reconciliation can not be obtained, arbitration shall be resorted to, and the parties so notified.

Procedure Before Central Board.

Employers and workers may present their differences before the central board of conciliation and arbitration either orally or in writing, acting themselves or through representatives. The board shall summon the parties to appear before it within 48 hours, but a longer time may be allowed if the parties live outside the capital. At the meeting of the parties concerned the board shall attempt to effect a compromise, and if successful both parties are bound by the terms of the settlement. In case the parties fail to agree, the plaintiff may present his claims to the court of arbitration. All conciliation decisions shall be reached by majority vote, and if such vote can not be obtained a note to that effect shall be added to the record of the case which is submitted to the arbitral tribunal to be used as evidence. The president of the central board shall summon both parties to appear before him within 48 hours (within an extension of time if needed because of distance), and at the request of either side may grant a period of not more than eight days in which to submit proof. At the hearing the parties can make their allegations either orally or in writing, and thereafter the court shall announce its award within eight days. Decisions shall be by majority vote, and are binding on both parties and not subject to appeal.

If an employer refuses to submit his differences to arbitration, the labor contract shall be considered as terminated, and the employer shall indemnify the workman by the payment of three months' wages, as well as his traveling expenses back home, provided this stipulation appears in the contract. If the worker refuses to submit to arbitration, the contract will be held to have terminated without obligations on the employer.

Hours of Labor and of Rest.

THE law establishes the maximum 8-hour day as the legal working day in shops, factories, foundries, agricultural pursuits, private offices, and mercantile and mining enterprises, and in general in every kind of day work. The law stipulates seven and one-half hours as the maximum number of hours which a laborer shall be permitted to work at night. Day work is defined as being all work done between 7 a. m. and 8 p. m., and night work as that done between 8 p. m. and 6 a. m. The law contains a further classification of the workday, the so-called "mixed day," in which the working period includes both day work and night work.

In continuous industries and those which require special hours for the work, the employers and workers shall make a mutual agreement as to the exact division of working hours and rest periods.

Overtime work, i. e., all work in excess of the maximum working-day, is permitted only under extraordinary circumstances and by mutual agreement between the employers and workers. The law further provides that overtime work shall not exceed three hours per day and shall not be required on more than three consecutive days, nor more than 50 days in the year.

Employment of minors at overtime and night work is prohibited by the law. It sets the maximum day's work for children over 12 and under 15 years of age at four hours, and for those between 15 and 16 years of age at six hours.

Employment of women after 10 o'clock at night in factories, private industrial shops, or mercantile establishments is prohibited. Although eight hours constitute the maximum working-day for women, six hours shall be the maximum for pregnant women.

Rest Periods and Weekly Day of Rest.

The law provides that the workday shall not be continuous, but that the employees shall be granted periods of rest in addition to their mealtime, to be fixed by mutual agreement between employers and workers. The law stipulates that for six days of work there must be one day of rest, and establishes Sunday as the obligatory rest day. The 1st of January and the 16th of September of each year shall be obligatory holidays. If the Sunday rest day interferes with the normal functioning of an establishment which affects public service, another day during the week shall be selected for the rest day or the shift system of work shall be employed.

Employers shall allow all workers who have been in their employ for over one year 15 days' vacation each year with pay.

Wages.

WAGES are defined by the law of Durango as the pecuniary remuneration paid by the employer to the employee in return for services rendered. The wages should be sufficient, according to the conditions prevailing in the district, to satisfy the normal needs of life of the workman, his clothing, education, and lawful pleasures, considering him as the head of a family. Equal compensation shall be paid for equal work, no discrimination being made because of age, sex, or nationality. All wages shall be paid in legal currency and not in counters, orders, cards, or any other substitutes for money. If under special circumstances it becomes necessary to increase the working hours, overtime shall be paid for at double the regular rate. All wages must be paid at regular periods agreed upon in the contract which must not exceed 15 days, except in the case of private office employees, workers in mercantile establishments, and domestic servants, who shall be paid once a month. In factories, agricultural undertakings, and industrial and mining establishments, the employees shall be paid each week. Wages must be paid directly to the worker or to some one designated by the worker, and such payment must be made at the place of employment and not in stores, restaurants, cafés, canteens, and the like.

Wages may not become the subject of attachment, set-off, or discount unless authorized by judicial or administrative authority.

The law provides that the payment of wages to minors under 16 years of age is valid unless the parent or guardian of the employee who authorized the employment contract opposes such payment. In such case the employer shall notify the minor and turn the wages over to the mayor, who shall dispose of it to the best interest of the minor employee.

If the wages of a worker are determined by the size, quality, weight, or measure of the goods produced, he shall have the right to be present or to send a representative when the rate of payment is being determined.

Establishments which allow employees to participate in the profits of the business shall also allow the worker or his representative to examine the books of the firm to determine the amount of the profits which he is to receive.

In the following instances employers are obliged to advance payment of one month's wages to their employees: (1) When the worker suffers an accident, for which the employer is not liable, which prevents him from working; (2) in case of sickness of a member of the employee's family; (3) in the event of the marriage of the worker or of his children; (4) in case of the death of a member of the employee's family. The wages advanced shall be repaid by deductions from his wages in amounts not exceeding 20 per cent of the sum loaned. The employee shall not be compelled to pay interest on this loan.

In case of bankruptcy or dissolution of the firm, salaries or wages and compensation due employees shall be preferred claims under the law of Durango.

Hygiene and Safety.

Employers' Obligations and Responsibilities.

THE law requires employers in agricultural, industrial, mining, or similar classes of work who employ more than 100 workers to furnish comfortable and sanitary dwellings for their workmen, for which they may charge annual rents not exceeding 6 per cent of the assessed value of the property. The employers shall also provide schools, dispensaries, and other services necessary to the community. When the population in a labor center exceeds 200 the employer must provide a tract of land of not less than 5,000 square meters (1,235 acres) for the establishment of public markets and the construction of buildings designed for municipal services and places of amusement. Gambling houses and stores which dispense intoxicating liquors are prohibited in these labor centers.

According to the law all employers must see that the work is done under the most favorable conditions from the standpoint of the safety and health of the workers. They shall adopt adequate accident prevention measures, and inform workers how to prevent accidents in the use of machines and other instruments.

In mines, canals, and drainage systems, and in general all undertakings in insanitary regions in Durango, the spread of malarial or infectious diseases shall be prevented as far as possible.

Great care shall be exercised in the handling of poisonous materials, to prevent the employees' health being undermined.

The law contains a provision requiring employers to provide first-aid treatment, as well as necessary medicines, in case of accident to the workers. The law provides for labor inspectors, who shall see that all safety and hygiene regulations are carried out. They may order defective machines which endanger the welfare of the workers stopped for immediate repair.

Employees' Obligations.

All workers must abstain from imprudent acts which may endanger the safety of themselves, of their fellow workers, or of the factory, shop, or other work place. In case of grave danger in the establish-

ment, the workers shall give assistance in every possible way without demanding pay for overtime. Workers shall advise their immediate superiors, or the employer himself, of any imperfections or breaks in the machinery, in order to avoid accidents. Employees shall not clean or oil machines while in motion, nor order apprentices to do so.

Shop Regulations.

THE law contains provisions requiring shop regulations (*reglamentos de los talleres*) in industrial, commercial, and agricultural establishments, in permanent labor camps, and in other labor centers, providing there are 10 or more employees. These regulations, based on the employment contracts, shall determine clearly the functions of both employers and employees. After the rules have been approved and registered by the municipal and central boards of conciliation and arbitration, a copy shall be posted in a conspicuous place on the premises. The workers are not to be denied the privilege of obtaining copies if they so desire.

Specific points which must be included in the shop rules are as follows: The rate of wages or earnings; the time of assigning materials and of receiving work done outside of the establishment; the hour of beginning and of stopping work; and the time allotted for rest periods and for the noonday meal. There shall be instructions in the shop regulations for the cleaning of machinery, other apparatus, and the interior and exterior of the factories, specifying when this shall be done and indicating precautions to be taken. The names, rights, and obligations of the managerial force and the inspection officers are to be clearly stipulated. Provision for a safe, orderly, and healthful place of employment and practical instruction in first aid and warnings to avoid accidents shall be contained in the shop rules. There shall be a statement of the inspection rights of the employees. The law also provides that the shop rules shall contain an exact copy of those articles in the employment contract which refer to (1) the termination of contracts, (2) the worker's participation in a strike, and (3) the punishment imposed on strike agitators. Regulations prohibiting employers from abusing the workers by word or deed, and from withholding the wages of a worker on the pretext of a fine, shall also be included. Neither collections nor subscriptions shall be permitted in the establishments. The rules shall stipulate the punishment for violations of the regulations. Any other provisions common to labor codes, for the better execution of the work, may be added to the rules. Unless the provisions of the regulations agree with the terms of the employment contract and with the labor laws they shall be null and void. Before signing a contract all workers must be made acquainted with the contents of the shop regulations and promise to comply therewith.

Employers shall compensate employees for all damages suffered on account of negligence or disobedience of shop rules on the part of the employer or his representatives.

Workmen's Compensation.

THE law stipulates that the employer is liable for industrial accidents and occupational diseases suffered by his employees arising out of the employment.

Employments Covered.

The compensation law of Durango covers work in factories, workshops, industrial undertakings, mining and quarry operations, metallurgical works, foundries, stevedoring, and all construction work. State and municipal employees are included under this law when their work endangers their life or health.

Injuries Covered.

The law defines an industrial accident as an injury caused by some fortuitous event during the employment. An occupational disease is defined as any illness which is contracted by work in damp or unhealthful places or by the constant use of injurious substances in the manufacture of explosives, inflammables, or poisons.

Injuries are not compensable when they are due to the employee's willful misconduct, gross negligence, or to a cause foreign to the employment.

Employers are liable for industrial accidents or occupational diseases suffered by the employees even when the labor contract is made through an agent (*intermediario*).

Compensation Benefits.

The compensation scale is based upon the earnings of the injured employee:

Death.—For death from industrial accident or occupational disease the employer shall pay the beneficiaries compensation equal to two years' wages of the deceased and, burial expenses of 50 pesos (\$24.93, par). In fatal cases for which the employer is not liable he shall pay one month's wages of the deceased employee to his dependents or the burial expenses if there are no relatives. Death benefits shall be paid within eight days to the widow or next of kin.

Permanent total disability.—An employee who is permanently and totally disabled as the result of an industrial accident or occupational disease shall receive compensation amounting to two years' wages. Blindness, paralysis, loss of fingers, etc., are considered as permanent total disability.

Permanent partial disability.—In cases of permanent partial disability resulting from accident the employer shall furnish the employee other suitable employment with equal pay and may not discharge him for a period of two years from the time of the accident. The law describes permanent partial disability as that which permanently incapacitates the employee for the performance of the work which he was doing at the time of the accident. Compensation benefits for permanent partial disability shall be paid to the employee within eight days after his complete recovery.

Temporary disability.—For temporary disability employers are required to pay employees their full wages from the time of the injury until they are able to return to work and furnish medical attention and medicine.

Medical service in ordinary illness.—Employers are required to furnish medical attention for employees who are ill through no fault of their own and also to pay them one-half of their regular wages for a period not exceeding 30 days.

Administration.

The provisions of the law regarding workmen's compensation are administered by award of the central board of conciliation and arbitration, and the award is enforced by the municipal board.

Admiralty Jurisdiction Over Stevedores.

THE Supreme Court of the United States on February 25, 1924, had before it a case (*State of Washington v. W. C. Dawson & Co.*) from the Supreme Court of Washington, and another (*Industrial Accident Commission of the State of California v. James Rolph Co.*) from the Supreme Court of California, involving the constitutionality of the act of Congress of June 10, 1922, with reference to stevedores and longshoremen. The decision of the Supreme Court of Washington (122 Wash. 572) was followed by that of California in declaring the act in question unconstitutional, and the cases came to the Supreme Court of the United States on writs of error. These decisions were based on the ruling of the Supreme Court on an earlier statute of similar intent. (*Knickerbocker Ice Co. v. Stewart*, 253 U. S. 149, 40 Sup. Ct. 438.) There the act in question was an amendment of the Judicial Code (40 Stat. 395, act of October 6, 1917), which undertook to give the rights and remedies under the workmen's compensation law of any State to claimants in admiralty and maritime jurisdictions. Following the declaration of invalidity of this statute, the amendment of 1922 was enacted, limiting compensation relief to persons other than the master or members of the crew, the intention being to make the law applicable only to local workers such as stevedores and longshoremen.

The State courts, holding that Congress could not thus create a diversified remedy in the field in which the uniformity of the maritime law must be protected under the rulings of the Supreme Court were sustained in the present case, the Supreme Court saying: "The judgments below must be affirmed; the doctrine of *Knickerbocker Ice Co. v. Stewart*, to which we adhere, permits no other conclusion." The act of 1922 undertook to do substantially what the act of 1917 proposed, the court holding that "the exception of master and crew is wholly insufficient to meet the objections to such enactments heretofore often pointed out." It had been said by the court in an earlier case that "no such [State] legislation is valid if it contravenes the essential purpose expressed by an act of Congress, or works material prejudice to the characteristic features of the general maritime law, or interferes with the proper harmony and uniformity of that law in its international and interstate relations." (*Southern Pacific Co. v. Jensen*, 244 U. S. 205, 37 Sup. Ct. 524.)

The contention was made that subsequent decisions of the court had modified this position, but this contention was denied. It was again pointed out that to sanction such action as was contemplated by the attempted amendment to the Judicial Code would lead to a transfer by Congress of its legislative power to the States, a function that is "by nature nondelegable."

As to the power of Congress itself the opinion declared:

Without doubt Congress has power to alter, amend, or revise the maritime law by statutes of general application embodying its will and judgment. This power, we think, would permit enactment of a general employers' liability law or general provisions for compensating injured employees; but it may not be delegated to the several States. The grant of admiralty and maritime jurisdiction looks to uniformity; otherwise wide discretion is left to Congress. Exercising another power—to regulate commerce—Congress has prescribed the liability of interstate carriers by railroad for damages to employees (act April 22, 1908; ch. 149, 35 Stat. 65) and thereby abrogated conflicting local rules.

This cause presents a situation where there was no attempt to prescribe general rules. On the contrary, the manifest purpose was to permit any State to alter the maritime law and thereby introduce conflicting requirements. To prevent this result the Constitution adopted the law of the sea as the measure of maritime rights and obligations. The confusion and difficulty, if vessels were compelled to comply with the local statutes at every port, are not difficult to see. Of course, some within the States may prefer local rules; but the Union was formed with the very definite design of freeing maritime commerce from intolerable restrictions incident to such control. The subject is national. Local interests must yield to the common welfare. The Constitution is supreme.

This opinion, delivered by Mr. Justice McReynolds, was dissented from by Mr. Justice Holmes, who said simply that "the reasoning of *Southern Pacific Co. v. Jensen* and cases following it never has satisfied me and therefore I should have been glad to see a limit set to the principle. But I must leave it to those who think the principle right to say how far it extends." Mr. Justice Brandeis, however, wrote a vigorous dissent, pointing out incongruities that are already embodied in admiralty jurisprudence, in brief, as follows:

An employee of a New York upholstering concern might be directed to do repair work on a vessel owned and enrolled in New York, employed wholly within the State, and at the time lying for repairs alongside a New York dock. If injured without fault and disabled while at such work, he would, under the New York compensation law, be entitled to relief. Congress undertook in express terms to sanction this relief in a case such as that above described, but the rule announced by the Supreme Court is to the effect that the Federal Constitution prohibits such recovery. If this same employee had met with an accident while on the dock in connection with the same employment the Constitution would permit recovery. Moreover, if he had been killed while on board the vessel through the negligence of the employer his dependents might have recovered, not under maritime law, but under a statute of New York, the operative effect of this statute being held permissible under the Constitution.¹

Mr. Justice Brandeis in his argument stated that the chain of reasoning followed by the majority depended upon the soundness of every link of the chain. "If any link fails, the argument falls. Several of the links are, in my opinion, unfounded assumption which crumbles at the touch of reason." Cases were cited to uphold the statement that "absolute uniformity in things maritime is confessedly not essential to the proper harmony of the maritime law in its interstate and international relations." The efforts of Congress were said to be an attempt "in a statesmanlike manner, to limit the practical scope and effect of our decisions in" the *Jensen* and *Knickerbocker* cases, so as to be applicable only to the relations of the ship

¹See MONTHLY LABOR REVIEW, February, 1924, (pp. 186-192). "Status of maritime workers injured in the course of employment."

to her master and crew, but not to the localized employees such as stevedores, etc. Persuasive reasons were found for recognizing such legislation, overruling other decisions if necessary. Otherwise a constitutional amendment will be required to permit the application of the various local laws, "for no Federal workmen's compensation law could satisfy the varying and peculiar economic and social needs incident to the diversity of conditions in the several States."

Restriction of Marketing of Building Materials Shipped in Interstate Commerce.

THE widely advertised effort of the Industrial Association of San Francisco to enforce what it designated the "American plan" in the local building industry reached a Federal court in November, 1923, on the ground of interference with interstate commerce in violation of the Sherman Act (*United States v. Industrial Association*, 293 Fed. 925). The United States brought action against the defendants, about 40 in number, among them the Builders' Exchange and the Industrial Association, together with corporations, individuals, and partnerships belonging to each. A system had been established under which no one could purchase building materials covered by the system without a permit from the Builders' Exchange, and this permit could be obtained only on a pledge to run the job on the American plan. The plan contemplated the employment of union and nonunion men in equal proportions, with a nonunion foreman on each job. The court announced itself as not lawfully concerned with the merits or demerits of the plan or with the recurring conflict between employers and labor unions; but if a Federal law was contravened, it must take note of the fact and seek to prevent such contravention or to punish those involved in it.

As the system was first established only local products, such as lime, cement, plaster, ready-mixed mortar, rock, sand, gravel, brick, and all clay products, were covered. Intention to interfere with interstate commerce was disavowed, but later other materials were brought under the permit system, some or all of which were produced without the State. For instance, plumbers' supplies, which are manufactured for the most part without the State, while not dealt with directly by the permit system, were controlled by "refusing a permit to purchase the materials that were under the system to anyone who employed a 'bad plumber;' that is to say, one who was not operating under the American plan."

The court found a concert of action to maintain the American plan, involving the use of a permit system which included not only articles produced within the State but those which come in interstate commerce from without, and an indirect control of plumbing supplies through the requirement that only "good plumbers" shall be employed before a contractor can have a permit. "However little intended to interfere with interstate commerce, as claimed by the defendants, the result of their concerted action is such an interference therewith as under the Sherman Act can not be tolerated."

The court announced no desire to curb the activities of the organizations other than necessary for the protection of interstate commerce. The organizations were not dissolved nor their general activities interfered with, but there was an injunction against the requirement of any permit with reference to materials or supplies produced without the State and coming in in interstate commerce; also against any attempt to prevent or discourage persons without the State from shipping goods to any persons whatever within the State. Compliance in good faith with this decree would avoid disturbance of other activities, but the right to modify the decree was reserved, so as, if necessary, to include the dissolution of certain of the defendants.

Conspiracy to Collect Money for Strike Settlement.

DURING the course of a large building operation in the city of Chicago a jurisdictional dispute developed, one McCumber, a contractor for the carpenter work, becoming involved in a difficulty between carpenters and ironworkers. The subject matter was the installation of wooden doors in an iron framework. The carpenters claimed that they should hang the doors, but McCumber had contracted with the ironworkers for the job. In the controversy that followed an understanding was reached, according to McCumber's testimony, with the business agent of the local union of carpenters that if the carpenters were allowed to apply the hardware to the doors the business agent would permit the ironworkers to install them. The agent, one Seefeldt, admitted that this was the understanding, but later said that his superiors overruled him and that the doors should be hung by the carpenters alone. The ironworkers began the work and declined to stop. The carpenters' representatives thereupon had a conference with McCumber and the architect in charge, but reached no solution of the difficulty. The president of the district council, after some conversation, said: "Is that all you have got us over here for?" The architect replied that if anything was implied by this remark he wished to say that his office had never paid tribute and never would, whereupon the first speaker replied: "If that is all you have to say, let's go." McCumber went down with the union representatives in the elevator and asked what could be done to get the carpenters back to work. To this the local president, Brims, said: "Mr. Seefeldt will call over to your office and see you about it, and I think you can get it settled." Seefeldt called and said the men would have to be paid for their lost time, about \$400. Subsequent computations reduced the amount to \$225, which was paid, Seefeldt promising that the men would go back to work next morning, which they did. McCumber testified that before Seefeldt left he said: "Mac, I don't approve of this sort of thing at all; I don't like it, but I have to do it; I am made the goat by the higher-ups," and told McCumber that they must keep the matter to themselves.

Based on the above incidents a prosecution for conspiracy was brought against Brims, the district president, and Seefeldt, the local business agent, and they were found guilty of conspiracy in the courts below, the judgment being affirmed in proceedings in the supreme court. The court found no showing that the primary object in calling this strike was for the benefit of the union or its members.

The strike had not been sanctioned as provided in the agreement, and there was no evidence tending to show that any of the \$225 was paid to the workmen, but rather to the contrary. McCumber did make payments on account of the time the carpenters lost, and that amount was charged to the owner of the building. Furthermore, the ironworkers were afterwards permitted to finish the work which had previously been made the occasion of the strike, without any jurisdictional question being raised. This, with the fact that the \$225 was not paid to the men who were called on to strike, was said to tend to discredit the contention that the strike was brought to benefit the union or the men.

The jury having passed on the weight of the disputed testimony, and the errors assigned offering no reversible cause, the judgment of the court below was affirmed (*People v. Seefeldt*, 141 N. E. 829).

Awards Concerning Duration of Bonus Offered New York Bricklayers.

JUSTICE Ford, of the Supreme Court of New York, has recently (February 2, 1924) made an arbitration award in a dispute between the Mason Builders' Association and the Bricklayers' Unions of Greater New York, sustaining the contention of the union. The disagreement arose over a ruling adopted by the union during the high peak of building activity in New York City in the summer of 1923. There was a scarcity of bricklayers, and employers were offering bonuses over and above the established union wages. The unions adopted a rule that if an employer paid higher than union rates to any bricklayers on a particular operation all union bricklayers on the job should receive the same higher wages, and that these wages should continue during the life of the job. By September the demand for bricklayers began to fall off, and the employers who were conducting certain operations, finding that they were now able to get bricklayers without difficulty, wished to discontinue paying the bonus. The unions denied their right to do this, and the matter went through the usual procedure for such cases, Justice Ford being finally selected as arbitrator.

Reviewing the conditions which led up to the adoption of the rule in question, Justice Ford decided that it was fair and reasonable and should be enforced. The following is quoted from the award:¹

The unions manifestly could not reasonably be expected to forbid their members from accepting the higher wages offered them, and it is doubtless true that any effort to do so would prove futile.

The unions therefore adopted a rule whose purpose it was to discourage employers from enticing men from one operation to another by offering higher wages. Stability, certainty, uniformity of wages, continuity of employment, were sought. While temporary advantage might be gained by individual workmen through higher wages, the system did not work to the advantage of either side in the long run. * * *

Practically it is the fairness of this rule which is under consideration, for the employers are urging their right to reduce the wages of the men on the jobs in question before they are finished. This reduction has been made practicable because of the seasonal falling off in the demand for bricklayers.

¹From typewritten copy of decision, dated Feb. 2, 1924, of Supreme Court Justice John Ford, of New York, "In the matter of controversy between bricklayers' unions and mason builders' association."

It has been urged with no little force on behalf of the unions that it would be unfair to the men who were enticed to the jobs by higher wages than the union rate to reduce their wages before the end of the operations concerned, simply because the law of supply and demand now makes that reduction possible. It is contended on behalf of the men that their expectation was to have steady employment at the wages offered during the life of the job. That is an implied condition of every employment, unless by its terms contrary conditions are agreed upon. Continuity of employment during proficient service is a tacit understanding ordinarily between employer and employee, modified of course by the nature and peculiar circumstances of the employment.

As to the law of supply and demand, the agreement under which harmonious relations between the parties have so long continued is in essence the negation of the free play of that law as the sole determining force in the fixation of wages and the conditions of employment. Labor unions exist to act as a corrective check on that law as it practically operated before labor was organized. * * *

The claimed right of the employers to reduce wages rests upon the law of supply and demand. Their arguments as presented to me boil down to that. There are so many more men available now to do their work they find it possible to reduce wages on the uncompleted work and they naturally want to do so.

There is much reason in their contention but on the whole I am of the opinion that fairness, common sense, and a consideration of the best interests of both sides as I see them, require me to decide that the rule of the unions is just and that the higher wages should be paid during the life of the operations. * * *

It does not seem to me that any hardship will be inflicted upon anyone by this decision. Builders and owners, it may reasonably be assumed, knew what they were doing when they undertook their work at the high rates of wages then paid upon the jobs in question here. Payment at those rates during the life of the job must have been in contemplation at the time of undertaking every operation. My understanding is that most, if not quite all of them, will be finished shortly. On all new work, the employers may employ men at the union rate. I believe that it will be to the advantage of all in the long run if the higher rate be paid on the uncompleted operations until they are finished. I answer the question in the affirmative.

COOPERATION.

Cooperative Housing in New York City.¹

THE problem of housing accommodation is being solved cooperatively in various places not only in Europe, but in the United States, although very little was done along this line in the United States until 1920. Accounts and statistics of these cooperative housing societies in various countries have appeared from time to time in the MONTHLY LABOR REVIEW.²

It is stated that "the idea of cooperation in housing began to receive attention after the passage of the State emergency rent laws four years ago and the subsequent enactment of the tax exemption law for the stimulation of building." Here and there, throughout the city, experiments in cooperative housing were begun by groups of wage earners of moderate incomes but these were not advertised and thus made little impression on the public. A "preliminary survey" of cooperative housing recently made disclosed the fact that in Greater New York, up to the present time, more than 500 families have been provided with housing facilities by cooperative effort.

The greatest results have been obtained by a Finnish colony in Brooklyn, whose housing efforts began to take shape as early as 1916 when one building was erected. Since then building after building has been built or bought, and now these Finns own cooperatively 10 apartment houses, accommodating 450 families or about 2,250 persons. The rents range from \$30 to \$50 per month.

Another group of cooperative dwellings has been provided chiefly through the efforts of the pastor of the People's Tabernacle in Manhattan. This work has been carried on in connection with the church, which is interdenominational. Three years ago, the church bought an apartment house, apartments in which it offered for sale on the cooperative plan. Since then four others have been added.

In the genuine cooperative housing association the capital stock is all held by the tenant members, the amount held by each being in proportion to the size and cost of his apartment. No tenant receives title to his apartment or dwelling, for he does not own a house, strictly speaking; he simply owns stock in the association. The object of this is to prevent speculation. If a tenant desires to move away he sells his shares back to the association.

To eliminate all speculation in houses, the cooperative society as a whole must always own and control the title to both the land and the building. This not only tends to eliminate exploitation of the tenants, but also prevents their exploitation of others at any time. The so-called unearned increment of land values is also preserved in this way to the whole group. The cooperative company, not the individual, profits by any increase in the valuation of the property. It is not the purpose of cooperative building societies to enable tenants to obtain homes at bottom prices by building collectively and then to allow the individuals to own and sell them to others for profit. The purpose of cooperative building societies is to provide permanent homes for the people without private profit or speculation in land and buildings, collectively controlled and administered by the tenant members.³

¹Data are from New York Times, Feb. 24, 1923, Section 8, p. 8.

²See issues of MONTHLY LABOR REVIEW for information on cooperative housing in the following places: Brooklyn, October, 1921, p. 172; Milwaukee, December, 1922, pp. 155-158; Czechoslovakia, December, 1923, p. 198; Germany, January, 1923, p. 206; Great Britain, July, 1923, p. 237; Netherlands, March, 1924, p. 195; Poland, December, 1923, p. 200; and Switzerland, October, 1921, p. 171, and March, 1924, p. 196.

³Report of committee on cooperative housing to Third Congress of the Cooperative League, at Chicago, Oct. 26-28, 1922. See MONTHLY LABOR REVIEW, December, 1922, p. 157.

Cooperation in Foreign Countries.

Austria.

THE following table taken from The People's Yearbook (Manchester, England), 1924, p. 93, shows the condition of the Union of German-Austrian Consumers' Societies since the war. The decline in the number of members in 1922 was attributed to the withdrawal of two societies with a combined membership of 140,851.

ACTIVITIES OF MEMBERS OF GERMAN-AUSTRIAN COOPERATIVE UNION, 1919 TO 1922.

[Krone at par=20.3 cents]

Year.	Retail societies.				Wholesale society: Amount of business.
	Affiliated societies.		Number of members.	Amount of business.	
	Total number.	Number reporting.			
1919.....	112	103	370,866	<i>Kronen.</i> 572,771,278	<i>Kronen.</i> 486,422,347
1920.....	103	96	503,622	1,822,130,224	2,028,650,817
1921.....	97	90	574,116	10,388,278,304	10,063,182,027
1922.....	108	84	511,019	221,971,570,701	194,496,224,034

In addition to the 108 consumers' societies in existence in 1922 as shown above, the membership of the union includes 33 workers' productive societies, 22 building societies, 6 credit societies, 3 purchasing associations, and 1 insurance society.

Canada.

DURING the year ending August 31, 1923, the United Grain Growers (Ltd.) had a business of \$53,332,982 and a net saving of \$532,171, according to the February 11, 1924, issue of Agricultural Cooperation (Washington). Interest of 8 per cent was paid on the capital stock. During the previous year the association sustained a loss of \$118,350.

Czechoslovakia.

THE Statistical Office of the Czecho-Slovak Republic has issued a report (No. 30) on credit societies of the Schulze-Delitzsch type. The following table, compiled from the report, shows the number of these societies and the number of depositors and borrowers, by geographical division, at the end of 1921:

STATISTICS OF DEPOSITS AND LOANS OF CZECHOSLOVAK CREDIT SOCIETIES, 1921, BY GEOGRAPHICAL DIVISION.

[Krone at par=20.3 cents.]

Geographical division.	Number of societies.		Number of members.	Number of depositors.	Average deposit per depositor.	Number of borrowers.	Average loan per borrower.
	Total number.	Number reporting.					
Bohemia.....	809	793	323,032	1,073,641	<i>Kronen.</i> 2,970	196,298	<i>Kronen.</i> 9,892
Moravia.....	512	509	194,341	397,285	3,046	119,192	5,566
Silesia.....	57	54	17,085	30,560	2,497	9,223	6,617
Whole country.....	1,378	1,356	534,458	1,501,486	2,981	324,713	8,180

At the end of 1921 the financial condition of the societies was as follows:

	Kronen.
Amount of loans on personal credit.....	1, 737, 335, 000
Share capital.....	86, 812, 000
General reserve funds.....	79, 095, 000
Employees' retirement fund.....	10, 238, 000
Profits.....	21, 487

Denmark.

THE following figures, taken from the February, 1924, number of the International Cooperative Bulletin (p. 51), show the business done by Danish cooperative societies in 1922 and 1923:

BUSINESS OF DANISH COOPERATIVE SOCIETIES, 1922 AND 1923, BY TYPE OF SOCIETY.

[Krone at par = 26.8 cents.]

Type of society.	1922	1923
	<i>Kroner.</i>	<i>Kroner.</i>
Feedingstuffs societies.....	101, 500, 000	107, 000, 000
Manure societies.....	16, 000, 000	17, 500, 000
Agricultural wholesale society and machine factory.....	5, 800, 000	4, 700, 000
Cement factory.....	2, 500, 000	4, 800, 000
Coal supply society.....	2, 800, 000	3, 100, 000
Cooperative farms.....	535, 000, 000	665, 000, 000
Cattle export societies.....	34, 000, 000	29, 000, 000
Cooperative butcheries:		
Meats.....	330, 000, 000	395, 000, 000
Eggs.....	12, 600, 000	12, 000, 000
Egg export society.....	15, 000, 000	14, 700, 000
Cooperative seed society.....	6, 100, 000	4, 200, 000
Milk export of cooperative farms.....		6, 000, 000
Insurance society "Tryg".....	4, 000, 000	3, 900, 000
Accident insurance of cooperative farms and agricultural societies.....	2, 000, 000	2, 200, 000
Accident insurance society "Sogneraads".....	200, 000	200, 000
Cooperative pension fund.....	500, 000	500, 000
Cooperative sanatorium.....	500, 000	500, 000
Wholesale Society of Danish Distributive Societies.....	174, 600, 000	123, 400, 000
Ringkøbing Goods Purchase Association.....	5, 000, 000	4, 900, 000
Total.....	1, 248, 100, 000	1, 398, 600, 000

It is stated that the business of the consumers' societies during 1923 decreased 29 per cent from that of the year before while the trade of the agricultural societies increased 22 per cent

France.

LA VOIX DU PEUPLE, Paris, for November-December, 1923, contains (pp. 516, 517) an agreement which has been concluded between the General Confederation of Labor of France and the Consultative Chamber of the Workers' Cooperative Productive Associations. By this agreement the cooperative societies bind themselves to apply to the proper trade-union when employees are needed and not to obtain workers elsewhere unless the union is unable to supply them. In the latter case the new employees must join the union.

In case of a strike in private employments, workers employed by cooperative societies, who are members of the trade-union involved in the strike, shall not take part in the dispute but shall continue to work. They must however give both moral and financial support to the strike. The cooperative societies on their part agree to put into effect

immediately any change in working conditions contained in the union's demands. In case the strike is not successful in gaining all these demands, only those conditions which are won shall be retained in effect by the cooperative societies. Changes in wages are not to be made until immediately after the termination of the strike, but the new rates gained through the strike shall be retroactive to the first day of the dispute.

In cases in which no collective agreement with the establishments against which the strike was directed is obtained, and in which there is a difference of opinion as to the actual gains of the strike, the matter must be referred to a joint commission composed of an equal number of representatives of the cooperative society and of their employees, the representatives of the latter being chosen in part from persons named by the union.

When a general or partial protest strike "of a social character" is called by the General Confederation of Labor, the question of participation by the employees of cooperative societies shall be decided by the confederation and the societies must abide by its decision.

Disagreements of all kinds as to working conditions, hiring, firing, wages, etc., which can not be decided by the joint commission above mentioned shall be referred to an arbitration committee of four members, two selected by the General Confederation of Labor and two by the Consultative Chamber of Workers' Cooperative Productive Associations.

Germany.

THE annual report of the central credit union organization of Germany, the General Union of Raiffeisen Societies, for 1922, reviewed in the February, 1924, issue of the International Cooperative Bulletin (pp. 53, 54), shows that at the end of the year there were in affiliation with the union 8,017 societies as compared with 7,461 at the end of the previous year. Of these, 5,524 were credit societies proper, while the remainder were noncredit organizations. The net savings of these societies for 1922 amounted to 68,600,000 marks² and the reserve funds to 74,205,000,000 marks.²

Great Britain.

THE business of the English Cooperative Wholesale Society during 1923 amounted to £66,120,000 (\$321,772,980, par), an increase of £215,188 (\$1,047,212, par) as compared with the previous year, according to the February, 1924, issue of the International Cooperative Bulletin (p. 61). About a third of the sales of the society consists of goods manufactured by it; the manufactures of the society during 1923 were valued at £20,611,005 (\$100,303,456, par).

For the past 21 years the English and Scottish Wholesale Societies have carried on certain enterprises together. The original partnership formed to carry on the management of the tea plantations owned jointly by the two societies expired recently. The directors of the wholesales have decided to found a new society, composed of the board members, under the name "E. & S." Cooperative Wholesale Society (Ltd.), whose functions will be the carrying on of "the busi-

² Owing to the depreciation of German currency no attempt is made to convert this sum into the United States equivalent.

ness of planters, growers, producers, merchants, and manufacturers, commission agents, and brokers of tea, coffee, cocoa, and foreign and colonial produce in all their branches, and any other trade or business which may seem calculated to conduce to the more efficient and profitable working of the said business."

Statistics of The Cooperative Union, 1922.

Certain statistics of the activities of The Cooperative Union and its members during 1922 are given in the 1924 People's Yearbook (pp. 18-26). The following table, taken from the above source, shows the financial status of members of the union:

ACTIVITIES OF MEMBERS OF COOPERATIVE UNION IN 1922, BY TYPE OF SOCIETY.

[£ at par=\$4.8665.]

Type of society.	Number of societies.	Number of members.	Share and loan capital.	Sales.	Net surplus.	Number of employees.
Consumers' societies.....	1,321	4,519,162	£84,891,998	£169,582,357	¹ £14,060,291	128,037
Consumers' federations.....	6	64	46,757	133,434	7,722	34
Productive societies.....	105	38,138	2,938,786	5,318,077	² 314,904	10,779
Supply associations.....	4	8,542	496,742	1,856,540	50,686	1,529
Special societies.....	6	1,034	82,755	1,729,853	³ 28,537	2,070
Wholesale societies.....	3	2,149	31,951,612	83,600,549	⁴ 736,868	40,746
Total: 1922.....	1,445	4,569,089	120,408,650	262,220,810	15,199,008	183,195
1921.....	1,472	4,598,737	118,503,763	334,383,138	18,231,829	187,979

¹ Total net surplus of societies showing a surplus; some societies showed a loss, the total being £139,226.

² Before deducting a loss of £62,652.

³ Before deducting a loss of £166.

⁴ Before deducting a loss of £20,877

The following table shows the same data for the consumers' societies, classified according to geographical divisions:

STATISTICS OF OPERATIONS OF CONSUMERS' SOCIETIES IN 1922, BY GEOGRAPHICAL DIVISIONS.

[£ at par=\$4.8665.]

Geographical division.	Number of societies.	Number of members.	Share and loan capital.	Amount of business.	Net surplus.
Retail societies:					
England and Wales.....	1,027	3,819,881	£71,742,786	£133,381,269	£10,097,951
Scotland.....	255	654,384	12,497,609	34,573,462	3,888,548
Ireland.....	39	44,897	651,603	1,627,626	73,492
Total.....	1,321	4,519,162	84,891,998	169,582,357	14,060,291
Wholesale societies:					
English.....		¹ 1,195	25,507,090	65,904,812	420,063
Scottish.....		¹ 270	6,151,587	17,009,251	316,865
Irish.....		¹ 684	292,935	686,486	² 20,877

¹ Number of affiliated societies.

² Loss.

The consumers' cooperative societies, wholesale and retail, farm 74,257½ acres of land, of which they own 63,254½ acres and rent 11,003 acres. The tea plantations owned jointly by the English and Scottish Wholesale Societies cover 5,699 acres in Ceylon and 28,617 acres in India.

Greece.³

THE cooperative movement in Greece dates back only to 1914, in which year a law was passed authorizing the formation of cooperative societies, granting them postal facilities and various exemptions from taxation, and providing penalties for persons hin-

³ Article "La coopération agricole en Grèce," in *Annales de la Mutualité et de la Coopération agricoles*, Paris, March-April, 1923. Reviewed in *International Review of Agricultural Economics*, Rome, October-December, 1923, pp. 567-569.

dering their operation or endeavoring to dissuade persons from joining such societies. A later law, that of January 22, 1919, forbade the seizing, by personal creditors or members, of agricultural produce consigned for sale by members or of the proceeds of such sales. An added stimulus was given to the formation of agricultural societies by the agrarian laws of 1917 and 1920, which provided that grants of land expropriated by the State from the large landowners might be made to agricultural associations, formed for the purpose, under the title "associations for the repurchase of land." Members of these associations usually cultivate the land under the terms of a collective lease.

At the end of 1921 the number of societies of the various types was as follows:

	Number.
Credit societies.....	1, 287
Consumers' societies.....	111
Marketing associations.....	132
Wine, oil, and dairy societies.....	72
Land-holding societies.....	52
Livestock insurance societies.....	5
Land-purchase associations.....	49
Farming associations.....	2
Total.....	1, 710

These 1,710 societies had a combined membership of 93,103 and a share capital of 7,500,000 drachmas (\$1,447,500, par).

Italy.

ACCORDING to statistics compiled by the Association of Italian People's Banks, cited in the International Cooperative Bulletin for February, 1924 (p. 56), there are in Italy about 750 people's banks of the Schulze-Delitzsch type. The 732 which reported to the association had share capital of 159,451,655 lire (\$30,774,169, par), reserves of 112,710,686 lire (\$21,753,162, par), and deposits of 3,670,989,158 lire (\$708,500,907, par). As the report points out, the amount of deposits "bears striking testimony to the general confidence placed in the people's banks."

Mexico.⁴

DURING the past six months 13 new peasant cooperative societies were formed in the State of Guanajuato with the aid of the Mexican Department of Agriculture. The Government has extended aid along other lines as well, in the form of Government credit, legal service, and the opportunity to purchase needed agricultural machinery at cost.

Poland.⁵

IN 1921 there were in affiliation with the Auditing Union of Polish Agricultural Cooperative Societies, operating in what was formerly Russian Poland, 310 credit societies, 39 purchase and sale societies, 41 dairies, 2 flour mills, and 3 central organizations, a total of 395 cooperative societies. The cooperative credit societies which were members of the union had a combined membership of 104,844 and a working capital of 680,000 gold francs (\$131,240, par). The purchase and sale societies, with a total membership of 47,633, had a working capital of 994,000 gold francs (\$191,842, par) and a business during 1921 of 874,800 gold francs (\$168,836, par).

⁴ Press release 127 of All American Cooperative Commission.

⁵ International Labor Office. Industrial and Labor Information, Feb. 11, 1924, pp. 181, 182.

Portugal.⁶

AT THE end of 1922 there were in affiliation with the National Federation of Cooperative Societies 188 retail consumers' societies, with a total membership of 91,907 and a total business for the year of 488,930 escudos.

Spain.

AN ACCOUNT of the cooperative movement of Spain is given in the February, 1924, issue of the International Cooperative Bulletin (pp. 57, 58). This article states that although the movement dates back to 1865, comparatively little progress has been made. The greatest development has taken place in the Province of Catalonia where there are in affiliation with the Federation of Catalonian Cooperative Societies (which also functions as a wholesale society) some 250 societies with a membership of 5,000 and an annual business, in 1920, of 50,000,000 pesetas (\$9,650,000, par). Even in that Province, however, "progress has been impeded owing to the local spirit which prevails. It is by no means rare to find numbers of societies in the same town with a very insignificant membership." There is no national unity in the movement, although some federation has taken place by localities or districts. There is also division along political and religious lines, resulting in a Socialist, a Catholic, and a "neutral" movement.

Attention is called to the fact that "the absence of a central organization makes it impossible to obtain a reliable report of the importance of cooperation in Spain." It is estimated, however, that there are about 940 societies with a membership of 262,000. The statement below shows the affiliation of some 780 of these societies:

Societies affiliated to—	Number.
Federation of Catalonian Cooperative Societies.....	250
Union of Cooperative Societies of the North of Spain.....	40
Cooperative Union of Province of Valencia.....	30
National Catholic Agricultural Union.....	300
Federation of Tarragona.....	20
Guipuzcoa Union.....	20
Other societies:	
Civil and military societies.....	30
Military societies.....	50
Navvies' societies.....	100

Switzerland.

THE February, 1924, issue of the International Cooperative Bulletin (London) states (p. 59) that at the end of 1923 there were in affiliation with the Union of Swiss Consumers' Societies 516 societies with a combined membership of 364,500. These societies had a working capital of 29,000,000 francs (\$5,597,000, par) and landed property valued at more than 68,900,000 francs (\$13,124,000, par), while their sales during 1923 amounted to 277,000,000 francs (\$53,461,000, par).

The Insurance Fund of Swiss Consumers' Societies during 1923 paid out in invalidity and life insurance 259,109 francs (\$50,008, par), according to a statement in *La Coopération* (Basel), February 14, 1924. Receipts during the year amounted to 1,160,269 francs (\$223,932, par). Funds to cover insured risks amounted to 13,480,185 francs (\$2,601,676, par).

⁶People's Yearbook (Manchester, England), 1924, p. 122.

STRIKES AND LOCKOUTS.

Strikes in Chile in 1923.

ACCORDING to a press report¹ there were 41 strikes in Chile affecting 11,300 workers and causing a loss of 6,739,465 pesos (\$2,459,904.73, par) during the year 1923. Of the 11,300 strikers, 10,000 were men and 1,300 were women and minors. Efforts to obtain increases in wages and disputes over shop regulations were the main causes of the strikes. In general the strikes were unsuccessful from the standpoint of the workers, only 10 being won, while 15 were inconclusive, and 16 were lost.

Strikes and Lockouts in The Netherlands, 1922.²

BEGINNING with 1901 the Central Statistical Office of the Netherlands has each year compiled detailed statistics of strikes and lockouts in that country. It is therefore possible to follow the strike movement for a period of 22 years. The following table illustrates this movement during the period 1901 to 1922:

STRIKES AND LOCKOUTS IN THE NETHERLANDS, 1901 TO 1922.

Year.	Strikes and lockouts.	Establishments affected.	Strikers and locked-out workers.	Working-days lost—	
				By striking and locked-out workers.	By workers indirectly involved.
1901 to 1913, average.....	184	677	16,000	365,700	45,400
1914.....	271	1,138	15,700	361,400	8,200
1915.....	269	953	15,200	165,200	22,899
1916.....	377	1,174	18,100	249,400	24,200
1917.....	344	1,719	31,300	526,500	14,900
1918.....	325	1,910	39,600	607,200	100,000
1914 to 1918, average.....	317	1,379	24,000	382,000	34,000
1919.....	649	4,935	61,700	1,051,900	42,800
1920.....	481	3,014	68,500	2,288,600	45,400
1921.....	299	2,430	44,700	1,370,300	13,300
1922.....	325	3,371	44,000	1,057,500	50,800

The preceding table indicates that during the period 1914 to 1918, that is during the World War, the intensity of the strike movement, measured by the number of working-days lost, did not increase greatly as compared with the period 1901 to 1913, although the number of labor disputes and of establishments and workers involved was considerably greater than in the pre-war period. In the two years subsequent to the war the strike movement gained greatly in momentum. In 1919 the Netherlands had 649 strikes, and lock-

¹ El Mercurio, Santiago, Chile, Jan. 5, 1924, p. 3.

² Netherlands. [Ministerie van Binnenlandsche Zaken en Landbouw.] Centraal Bureau voor de Statistiek. Werkstakingen en uitsluitingen gedurende het jaar 1922. The Hague, 1923. 28 pp. Statistiek van Nederland, No. 374.

outs, the greatest number in the history of the country, and although the number decreased to 481 in 1920 the number of working-days lost in that year through labor disputes reached the unprecedented figure of 2,334,000 days. In 1921 and 1922 the strike movement slowed down again, owing to unfavorable economic conditions and extensive unemployment.

In 1922, 304 strikes occurred affecting 2,627 establishments and 32,092 striking workers and involving a loss of 778,184 working-days. The building trades account for the largest number of strikes (108). The transportation (37), food (26), woodworking (21), stone, earthen and glassware industries (21) follow in the order named. The building trades had also the largest number of strikers (7,311) and the largest loss of working-time (227,682 days). Demands relating to wages caused 68 per cent of the strikes; and next in importance were demands relating to hours of labor and to the reinstatement of discharged employees. Of the total number of strikes, 20.99 per cent ended with a victory of the strikers, 28.09 per cent were failures, 43.83 per cent were compromised, and in 7.10 per cent the result was not known.

The number of lockouts occurring in 1922 was 21. These affected 744 establishments and 11,890 workers and involved a loss of 279,316 working-days. The food and textile industries account for the lockouts involving the largest loss of working-time, 139,047 and 99,048 days, respectively. Ten lockouts were caused by the unwillingness of the workers to accept wage reductions. From the employers' point of view 9.52 per cent of the lockouts were failures, 28.57 per cent were successful, 57.14 per cent were compromised, and in 4.76 per cent of the lockouts nothing definite was known of the result.

CONCILIATION AND ARBITRATION.

Conciliation Work of the Department of Labor in February, 1924.

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION.

THE Secretary of Labor, through the Division of Conciliation, exercised his good offices in connection with 32 labor disputes during February, 1924. These disputes affected a total of 20,244 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workmen directly and indirectly affected.

On March 1, 1924, there were 47 strikes before the department for settlement and, in addition, 16 controversies which had not reached the strike stage. Total number of cases pending, 63.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION,
FEBRUARY, 1924.

Company or industry and location.	Nature of controversy.	Craft concerned.	Cause of dispute.	Present status and terms of settlement.	Duration.		Men involved.	
					Begin- ning.	End- ing.	Di- rectly.	Indi- rectly.
4 motion-picture theaters, Springfield, Ill.	Controversy	Theater employees	Asked increase and recognition.	Unable to adjust. Refused to sign union agreement.	1923, 1 Sept.	1924.	29	---
Rothchild & Small, Arlington, N. J.	Strike	Hat makers	Right of organization; collective bargaining.	Pending	Dec. 1	---	(1)	---
American Steel & Wire Co., Allentown, Pa.	Controversy	Employees	Discrimination and discharges.	do	(1)	---	5	1,000
Cap and millinery workers, Philadelphia, Pa.	Strike	Hat and cap makers	Asked \$2 a week increase.	Pending. Chance of settlement very remote.	1924, Jan. 19	---	14	---
Yellow Cab Line, Springfield, Ill.	do	Taxi drivers	Discharge of union men.	Pending	Jan. 2	---	8	32
Charlie Meyer Fants Shop, Belleville, Ill.	do	Clothing makers	Union recognition and increase.	Pending. Agreed except on recognition.	Jan. 14	---	53	---
Truck and ice drivers, Plymouth, Ill.	do	Truck drivers	Asked 15 cents an hour increase.	Adjusted. Returned; no increase.	Jan. 18	Jan. 19	3	---
Hall, Hartwell & Co., Troy, N. Y.	do	Shirt makers	Wage cut.	Adjusted. Returned; satisfactory agreement.	Jan. 10	Jan. 30	52	45
Blue Bell Bakery Co., Yonkers, N. Y.	Controversy	Bakers	Working conditions; closed shop.	Unclassified. Mediation not desired.	Feb. 1	---	2	---
Lehigh Valley Coal Co., Exeter, Pa.	Strike	Miners	Wages; working conditions.	Adjusted. Returned; referred to district board for settlement.	Jan. 31	Feb. 6	6	820
150 garment shops, Boston, Mass.	do	Ladies garment makers.	40-hour week.	Pending	Feb. 1	---	3,000	---
Teamsters, Belleville, Ill.	do	Teamsters	Wage increase; 10 cents an hour asked.	Pending. Many have settled; received increase.	Jan. 22	---	90	65
Keith Railway Equipment Co., Hammond, Ind.	do	Employees (steel)	Asked increase on piecework.	Adjusted. Increase of 40 cents a day to all employees.	Feb. 4	Feb. 15	74	---
Building trades, Omaha, Nebr.	Threatened strike.	Building trades	Renewal of agreement.	Pending	(1)	---	(1)	---
Hudson Shirt Co., Bayonne, N. J.	Strike	Clothing workers	10 per cent wage cut in effect.	Adjusted. Returned on piecework basis.	Feb. 1	Feb. 18	50	50
Woodward Colliery (Glen Alden Co.), Edwardsville, Pa.	do	Miners	Working conditions.	Adjusted	(1)	Feb. 19	1,800	---
Teamsters, Chicago, Ill.	do	Teamsters	Asked \$1 a day increase and 8-hour day.	Adjusted. 50 cents a day increase allowed—teamsters, \$6; chauffeurs, \$7.	Feb. 12	Feb. 14	2,500	---
Keomer Furniture Manufacturing Co., Boston, Mass.	Lockout	Upholsterers	Open shop and recognition.	Pending	Jan. 28	---	30	---
A. S. Kennedy, Cedar Rapids, Iowa	Controversy	Dance musicians	Nonunion musicians.	Adjusted. Agreement per American Federation of Musicians.	Feb. 9	Feb. 14	14	309

Champion Fiber Co., Canton, N. C.	Lockout	Employees	Proposed wage cut; conditions	Pending	Dec. 22	1,270	50
					Feb. 1	190	---

CONCILIATION AND ARBITRATION.

213

Lockout.....	Employees.....	Proposed wage cut; conditions, wages and renewal of agreement.	Pending.....	Dec. 22	1, 270	50
Strike.....	Bill posters.....	Working conditions.....	do.....	Feb. 1	160	---
do.....	Molders.....	(1) Renewal of contract of proof readers.	do.....	(1)	(1)	---
do.....	Bakers.....	Discharge of carpenter..	do.....	(1)	(1)	---
do.....	Printers.....	Renewal of contract of proof readers.	do.....	(1)	(1)	---
do.....	Miners.....	Asked 30 per cent increase.	Adjusted. Returned on condition man reinstated.	Feb. 21	425	---
do.....	Textile workers.....	Renewal of agreement.....	Adjusted. 15 per cent increase allowed.	Feb. 18	104	80
do.....	Painters.....	Placework begun at reduced rates.	Pending.....	(1)	(1)	---
Controversy.....	do.....	Open shop; recognition; wages.	Unclassified. 90 cents per hour allowed before commissioner's rival.	Feb. 1	(1)	---
Strike.....	Employees.....	Union contract and open shop.	Adjusted. Company agreed to raise piecework to former wage.	Jan. 31	35	40
do.....	Tailors.....	Working conditions.....	Adjusted. 44-hour week and prevailing wage allowed.	Feb. 6	15	10
do.....	Employees.....	Adjusted. Contract providing for union labor.	Adjusted. Contract providing for union labor.	Jan. 15	18	10
do.....	Miners.....	Adjusted. Returned to district board for settlement.	Adjusted. Returned to district board for settlement.	Feb. 27	6,000	2,000
Total.....					15,742	4,502

¹ Not reported.

IMMIGRATION.

Statistics of Immigration for January, 1924.

By W. W. HUSBAND, COMMISSIONER GENERAL OF IMMIGRATION.

THE following tables show the total number of immigrant aliens admitted into the United States and emigrant aliens departed from the United States during January, 1924, and from July 1923, to January, 1924. The tabulations are presented according to the countries of last permanent or future permanent residence, races or peoples, occupations, and States of future permanent or last permanent residence. The last table (Table 6) shows the number of aliens admitted under the per cent limit act of May 19, 1921, from July 1, 1923, to March 5, 1924.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT, JULY, 1923, TO JANUARY, 1924.

Period.	Arrivals.					Departures.			
	Immigrant aliens admitted.	Non-immigrant aliens admitted.	United States citizens arrived.	Aliens debarred.	Total arrivals.	Emigrant aliens.	Nonimmigrant aliens.	United States citizens.	Total departures.
1923.									
July.....	85,542	13,039	20,637	2,899	122,117	8,041	14,213	39,898	62,132
August.....	88,286	13,688	33,510	2,804	138,288	6,489	12,267	27,744	46,500
September.....	89,431	18,221	51,894	2,331	161,877	6,073	10,245	16,025	32,343
October.....	88,028	15,490	27,553	3,094	134,165	7,291	13,856	18,104	39,251
November.....	92,782	12,611	21,942	2,933	130,268	6,925	11,607	14,901	33,433
December.....	55,794	12,287	17,620	2,924	88,625	9,480	13,722	16,928	40,130
1924.									
January.....	33,878	10,476	15,638	2,145	62,137	5,723	8,689	20,817	35,229
Total.....	533,741	95,812	188,794	19,130	837,477	50,022	84,599	154,417	289,038

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED DURING JANUARY, 1924, AND FROM JULY, 1923, TO JANUARY, 1924, BY COUNTRIES.

Country.	Immigrant.		Emigrant.	
	January, 1924.	July, 1923, to January, 1924.	January, 1924.	July, 1923, to January, 1924.
Albania.....	2	221	30	153
Austria.....	705	6,821	5	126
Belgium.....	63	1,768	28	332
Bulgaria.....	3	481	23	155
Czechoslovakia.....	174	13,099	88	957
Denmark.....	254	3,604	78	341
Estonia.....	40	336		4
Finland.....	20	3,569	20	196
France, including Corsica.....	208	5,072	71	814
Germany.....	6,340	73,323	48	581
Great Britain, Ireland:				
England.....	138	23,458	193	2,900
Ireland.....	20	16,861	29	837
Scotland.....	27	33,212	27	545
Wales.....	5	1,503	1	41
Greece.....	81	4,221	539	4,541
Hungary.....	215	5,231	27	324
Italy (including Sicily and Sardinia).....	666	43,143	2,517	15,519
Latvia.....	26	1,389	2	57
Lithuania.....	46	2,231	5	223
Netherlands.....	37	3,584	18	224
Norway.....	189	9,982	43	526
Poland.....	259	27,965	79	1,625
Portugal (including Azores and Cape Verde Islands).....	12	2,533	99	2,568
Rumania.....	101	10,819	56	708
Russia.....	178	12,148	15	371
Spain (including Canary and Balearic Islands).....	33	625	171	1,854
Sweden.....	465	16,681	43	492
Switzerland.....	39	3,578	17	207
Turkey in Europe.....	19	1,401	15	63

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED DURING JANUARY, 1924, AND FROM JULY, 1923, TO JANUARY, 1924, BY COUNTRIES—Concluded.

Country.	Immigrant.		Emigrant.	
	January, 1924.	July, 1923, to January, 1924.	January, 1924.	July, 1923, to January, 1924.
Yugoslavia.....	1,050	5,089	90	1,226
Other Europe.....	4	299	5	21
Total Europe.....	11,419	334,247	4,391	38,463
China.....	389	5,290	346	2,502
Japan.....	352	3,068	155	1,504
India.....	6	126	14	117
Syria, Palestine, and Mesopotamia.....	60	2,530	18	310
Turkey in Asia.....	25	2,692	3	148
Other Asia.....	12	224	3	46
Total Asia.....	844	13,930	539	4,627
Africa.....	13	792	5	77
Australia, Tasmania, and New Zealand.....	22	532	25	299
Pacific Islands (not specified).....	1	37	7	17
Canada and Newfoundland.....	15,598	119,214	139	1,489
Central America.....	50	1,150	27	347
Mexico.....	4,920	46,689	99	1,324
South America.....	594	6,299	73	700
West Indies.....	396	10,799	419	2,677
Other countries.....	21	52	1	2
Grand total.....	33,878	533,741	5,723	50,022

TABLE 3.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JANUARY, 1924, AND FROM JULY, 1923, TO JANUARY, 1924, BY RACES OR PEOPLES.

Race or people.	Immigrant.		Emigrant.	
	January, 1924.	July, 1923, to January, 1924.	January, 1924.	July, 1923, to January, 1924.
African (black).....	264	7,425	109	847
Armenian.....	77	2,516	7	25
Bohemian and Moravian (Czech).....	79	6,459	51	862
Bulgarian, Serbian, and Montenegrin.....	321	2,162	56	1,218
Chinese.....	345	3,022	346	2,447
Croatian and Slovenian.....	615	3,576	21	63
Cuban.....	40	883	121	646
Dalmatian, Bosnian, and Herzegovinian.....	26	251	5	121
Dutch and Flemish.....	269	6,454	56	609
East Indian.....	7	92	12	114
English.....	5,283	64,037	327	4,368
Finnish.....	64	3,415	23	231
French.....	4,379	29,042	68	838
German.....	7,887	89,949	67	859
Greek.....	96	4,485	555	4,570
Hebrew.....	1,279	44,631	25	130
Irish.....	1,711	33,179	53	973
Italian (north).....	193	9,782	234	1,002
Italian (south).....	672	35,279	2,314	14,633
Japanese.....	346	2,758	153	1,480
Korean.....	5	45	1	18
Lithuanian.....	39	1,847	6	261
Magyar.....	249	6,707	34	344
Mexican.....	4,794	45,455	99	1,285
Pacific Islander.....	2	11		
Polish.....	302	18,190	72	1,657
Portuguese.....	39	3,166	114	2,669
Rumanian.....	96	1,419	54	699
Russian.....	213	8,269	21	456
Ruthenian (Russniak).....	180	1,643	2	7
Scandinavian (Norwegians, Danes, and Swedes).....	1,296	33,741	192	1,561
Scotch.....	2,062	48,688	65	793
Slovak.....	117	5,395	61	169
Spanish.....	134	2,471	235	2,303
Spanish American.....	94	1,709	40	533
Syrian.....	45	1,263	15	290
Turkish.....	11	298	15	197
Welsh.....	112	2,079	2	54
West Indian (except Cuban).....	72	1,283	43	441
Other peoples.....	63	665	49	249
Total.....	33,878	533,741	5,723	50,022
Male.....	20,837	321,102	4,964	37,436
Female.....	13,041	212,639	759	12,586

TABLE 4.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JANUARY, 1924, AND FROM JULY, 1923, TO JANUARY, 1924, BY STATES OR TERRITORIES.

State.	Immigrant.		Emigrant.	
	January, 1924.	July, 1923, to January, 1924.	January, 1924.	July, 1923, to January, 1924.
Alabama.....	12	373	1	29
Alaska.....	34	191	2	43
Arizona.....	766	8, 276	29	235
Arkansas.....	10	132	3	15
California.....	3, 528	37, 956	390	3, 758
Colorado.....	66	1, 188	28	121
Connecticut.....	472	10, 581	134	1, 029
Delaware.....	11	420	.....	7
District of Columbia.....	61	1, 239	20	199
Florida.....	189	2, 646	134	981
Georgia.....	13	358	8	48
Hawaii.....	182	1, 366	37	273
Idaho.....	68	756	12	72
Illinois.....	1, 958	39, 848	321	2, 585
Indiana.....	243	4, 666	36	428
Iowa.....	196	3, 344	30	180
Kansas.....	88	1, 263	7	59
Kentucky.....	30	483	8	28
Louisiana.....	100	898	25	253
Maine.....	1, 161	6, 987	19	75
Maryland.....	148	2, 710	11	172
Massachusetts.....	3, 532	44, 634	390	4, 514
Michigan.....	3, 688	43, 722	179	1, 681
Minnesota.....	487	8, 547	42	424
Mississippi.....	23	437	3	32
Missouri.....	234	3, 873	28	202
Montana.....	141	1, 359	10	135
Nebraska.....	123	2, 178	11	100
Nevada.....	17	188	4	39
New Hampshire.....	674	4, 337	8	51
New Jersey.....	1, 029	27, 598	194	1, 938
New Mexico.....	181	767	3	31
New York.....	6, 045	135, 952	2, 472	19, 070
North Carolina.....	7	230	5	42
North Dakota.....	74	1, 435	7	89
Ohio.....	907	21, 244	239	2, 290
Oklahoma.....	32	415	4	39
Oregon.....	505	4, 346	23	228
Pennsylvania.....	1, 439	42, 681	444	4, 339
Philippine Islands.....	.....	1	.....	.....
Porto Rico.....	14	156	7	106
Rhode Island.....	320	5, 928	74	924
South Carolina.....	3	131	1	11
South Dakota.....	55	840	3	49
Tennessee.....	7	329	5	28
Texas.....	2, 589	28, 262	38	814
Utah.....	47	932	32	190
Vermont.....	280	1, 983	6	36
Virginia.....	131	1, 610	8	129
Virgin Islands.....	.....	9	.....	.....
Washington.....	1, 395	13, 353	92	993
West Virginia.....	76	1, 762	51	442
Wisconsin.....	466	8, 345	55	424
Wyoming.....	21	476	21	66
Total.....	33, 878	533, 741	5, 723	59, 022

TABLE 5.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JANUARY, 1924, AND FROM JULY, 1923, TO JANUARY, 1924, BY OCCUPATIONS.

Occupation.	Immigrant.		Emigrant.	
	January, 1924.	July, 1923, to January, 1924.	January, 1924.	July, 1923, to January, 1924.
Professional:				
Actors.....	93	738	10	63
Architects.....	31	335	.....	8
Clergy.....	120	1, 417	16	235
Editors.....	9	36	.....	6
Electricians.....	199	3, 113	6	45
Engineers (professional).....	171	3, 807	29	198
Lawyers.....	12	155	7	28
Literary and scientific persons.....	24	563	9	59
Musicians.....	65	1, 151	3	47
Officials (Government).....	51	357	12	97
Physicians.....	83	821	5	54
Sculptors and artists.....	32	310	2	26
Teachers.....	144	2, 423	17	184
Other professional.....	217	2, 946	25	213
Total.....	1, 251	18, 172	141	1, 253

TABLE 5.—IMMIGRANT ALIENS ADMITTED TO AND EMIGRANT ALIENS DEPARTED FROM THE UNITED STATES DURING JANUARY, 1924, AND FROM JULY, 1923, TO JANUARY, 1924, BY OCCUPATIONS—Concluded.

Occupation.	Immigrant.		Emigrant.	
	January, 1924.	July, 1923, to January, 1924.	January, 1924.	July, 1923, to January, 1924.
Skilled:				
Bakers	157	3,056	16	119
Barbers and hairdressers	115	2,174	18	101
Blacksmiths	157	2,815	8	49
Bookbinders	16	243		1
Brewers	2	32		
Butchers	144	2,415	10	55
Cabinetmakers	12	394	2	23
Carpenters and joiners	870	12,820	66	389
Cigarette makers	4	41		2
Cigar makers	15	218	60	222
Cigar packers	2	20		1
Clerks and accountants	1,573	19,236	63	612
Dressmakers	136	3,202	6	82
Engineers (locomotive, marine, and stationary)	87	2,921	8	53
Furriers and fur workers	16	253	2	6
Gardeners	75	997	9	67
Hat and cap makers	9	269		2
Iron and steel workers	201	6,783	8	66
Jewelers	27	359	3	19
Locksmiths	249	3,576		3
Machinists	332	5,322	11	153
Mariners	692	6,696	29	211
Masons	255	4,579	25	94
Mechanics (not specified)	453	6,735	16	129
Metal workers (other than iron, steel, and tin)	72	967	4	13
Millers	21	477	1	72
Milliners	15	557		2
Miners	236	6,153	61	509
Painters and glaziers	206	3,078	11	77
Pattern makers	12	294		1
Photographers	18	375	2	8
Plasterers	43	513	6	21
Plumbers	101	1,626	3	44
Printers	113	1,353	4	23
Saddlers and harnessmakers	22	289		
Seamstresses	81	1,986	6	23
Shoemakers	110	4,167	18	206
Stokers	65	746	6	13
Stonecutters	22	450		14
Tailors	235	5,965	25	204
Tanners and curriers	2	166		4
Textile workers (not specified)	11	399		1
Tinners	32	617	2	5
Tobacco workers		25		
Upholsterers	18	305	2	5
Watch and clock makers	24	477	3	6
Weavers and spinners	82	2,475	16	309
Wheelwrights	12	122		
Woodworkers (not specified)	12	419	1	1
Other skilled	287	4,501	11	92
Total	7,451	123,658	542	4,105
Miscellaneous:				
Agents	107	1,506	16	83
Bankers	13	130	4	63
Draymen, hackmen, and teamsters	86	1,426	29	51
Farm laborers	1,178	23,046	23	183
Farmers	1,275	15,400	117	1,017
Fishermen	324	2,118	11	50
Hotel keepers	5	134	1	20
Laborers	4,943	74,460	3,367	24,847
Manufacturers	17	431	4	45
Merchants and dealers	628	8,853	154	1,577
Servants	1,942	44,825	213	1,523
Other miscellaneous	1,176	20,327	207	2,623
Total	11,694	192,656	4,146	32,087
No occupation (including women and children)	13,482	199,255	894	12,577
Grand total	33,878	533,741	5,723	50,022

TABLE 6.—STATUS OF THE IMMIGRATION OF ALIENS INTO THE UNITED STATES UNDER THE PER CENT LIMIT ACT OF MAY 19, 1921, AS EXTENDED BY PUBLIC RESOLUTION NO. 55, SIXTY-SEVENTH CONGRESS, APPROVED MAY 11, 1922, JULY 1, 1923, TO MARCH 5, 1924.

Country or region of birth.	Maximum monthly quota.	Admitted Mar. 1-5, 1924.	Annual quota.	Admitted July 1 to Mar. 5.	Balance for year. ¹
Albania.....	58	—	288	288	(²)
Armenia (Russian).....	46	2	230	151	66
Austria.....	1,468	10	7,342	7,242	64
Belgium.....	313	—	1,563	1,563	(²)
Bulgaria.....	61	—	302	302	(²)
Czechoslovakia.....	2,871	—	14,357	14,357	(²)
Danzig.....	60	—	301	301	(²)
Denmark.....	1,124	20	5,619	4,540	1,056
Esthonia.....	270	—	1,348	572	768
Finland.....	784	—	3,921	3,921	(²)
Fiume.....	14	—	71	59	12
France.....	1,146	34	5,729	4,658	1,015
Germany.....	13,521	—	67,607	67,607	(²)
Great Britain, Ireland.....	15,468	—	77,342	77,342	(²)
Greece.....	613	—	3,063	3,063	(²)
Hungary.....	1,149	11	5,747	5,438	280
Iceland.....	15	—	75	22	53
Italy.....	8,411	—	42,057	42,057	(²)
Latvia.....	308	—	1,540	1,540	(²)
Lithuania.....	526	—	2,629	2,629	(²)
Luxemburg.....	19	—	92	92	(²)
Netherlands.....	721	—	3,607	3,607	(²)
Norway.....	2,440	53	12,202	11,013	1,171
Poland.....	6,195	—	30,977	30,977	(²)
Portugal.....	493	—	2,465	2,465	(²)
Rumania.....	1,484	—	7,419	7,419	(²)
Russia.....	4,881	—	24,405	24,405	(²)
Spain.....	182	—	912	912	(²)
Sweden.....	4,008	8	20,042	19,272	739
Switzerland.....	750	—	3,752	3,752	(²)
Yugoslavia.....	1,285	18	6,426	6,340	86
Other Europe.....	17	—	86	86	(²)
Palestine.....	12	—	57	57	(²)
Syria.....	177	—	882	882	(²)
Turkey.....	531	27	2,654	2,639	(²)
Other Asia.....	19	—	92	92	(²)
Africa.....	21	—	104	104	(²)
Egypt.....	4	—	18	18	(²)
Atlantic Islands.....	24	—	121	113	8
Australia.....	56	—	279	279	(²)
New Zealand and Pacific Islands.....	16	—	80	80	(²)
Total.....	71,561	183	357,803	352,256	5,318

¹ After all pending cases for which quotas have been granted and admissions charged to the quota during the current fiscal year have been deducted from the annual quota.

² Annual quota exhausted.

Emigration from Denmark, 1923.¹

IN 1923, 7,601 persons recorded as having their "last permanent residence" in Denmark, emigrated overseas from that country, being 3,500 more than in 1922 and 2,300 more than in 1921. This approaches the normal pre-war figure of between 8,000 and 9,000. Of the emigrants, 5,813, or over three-fourths, came to the United States, 1,081 went to Canada, 651 to Central and South America, 44 to Australia, 10 to Africa, and 2 to Asia. Emigration to the United States doubled from 1922 to 1923, while emigration to Canada in 1922 was triple that of 1923. The number of emigrants to other places remained practically unchanged or else showed a decrease.

¹ Statistiske Departement. Statistiske Efterretninger, Feb. 6, 1924, p. 29.

FACTORY INSPECTION.

Massachusetts.¹

THE industrial safety work of the Massachusetts Department of Labor and Industries included 4,646 inspections and visits and 1,522 orders in February, 1924. In the same period 30 cases were prosecuted. Verdicts of "guilty" were secured in 19 instances.

Pennsylvania.

THE following report on some of the recent activities of the bureau of inspection of the Pennsylvania Department of Labor and Industries is taken from the February, 1924, issue of Labor and Industry, the official organ of that department. The figures do not include boiler and elevator inspection.

	December, 1923.	Since Jan. 1, 1923.
Inspections.....	3, 443	80, 927
Special inspections.....	2, 587	23, 287
Visits.....	1, 240	16, 725
Violations.....	717	10, 664
Prosecutions.....	11	328
Orders.....	384	7, 040
Compliances.....	736	7, 000

Italy.²

THE Italian Ministry of National Economy has published certain statistical information on the activities of the factory inspection service during 1922. The following table shows the number of establishments inspected and the number of workers employed in them:

ESTABLISHMENTS AND WORKERS INSPECTED, BY INDUSTRY GROUPS, 1922.

Industry group.	Establish- ments.	Workers.
Agricultural products, hunting, fishing.....	950	22, 523
Metal industry.....	595	19, 056
Minerals (excluding metals).....	121	4, 655
Building and construction.....	411	16, 523
Textile industry.....	513	51, 531
Chemical industry.....	165	7, 589
Public services.....	201	4, 182
Miscellaneous.....	44	671
Total.....	3, 000	126, 730

Of the 126,730 workers employed in the establishments inspected, 70,242 were male adults and 27,381 were female adults, 2,875 were boys and 26,232 were female minors.

¹ Data are from typewritten report from Massachusetts Department of Labor and Industries.

² Italy. Ministero del l'Economia Nazionale. Direzione Generale del Lavoro e della Previdenza Sociale. Bollettino del Lavoro e della Previdenza sociale, Rome, October, 1923. Pt. 1, pp. 317-320.

The following table shows the number of establishments and number of workers inspected, classified according to the labor laws under which the inspection was made:

INSPECTIONS CLASSIFIED ACCORDING TO THE LABOR LAWS UNDER WHICH THEY WERE MADE, 1922.

Subject of legislation.	Establishments.	Workers.
Accidents.....	2,689	122,483
Protection of women and children.....	1,714	100,300
Maternity insurance.....	1,252	80,600
Weekly rest.....	2,988	126,540
Nightwork in bakeries.....	74	500
Steam boilers.....	80	13,930

Of the 3,000 establishments inspected during 1922, 2,029 were inspected once only, while 971 were inspected twice or oftener. The number of special inspections in connection with infringements of labor laws and regulations was 2,904. The number of cases of infringement of labor laws reported in the course of inspections was 579, classified as follows: Accident insurance 218, employment of women and children 101, maternity insurance 110, weekly rest 7, night work in bakeries 24, steam boilers 24, miscellaneous laws 95.

The factory inspection service granted 72 exemptions under the weekly rest act; night work was authorized in 301 cases (bakeries, furnace repairs, electric power distribution) involving permits for a total of 2,733 nights.

WHAT STATE LABOR BUREAUS ARE DOING.

Massachusetts.

THE Massachusetts Department of Labor and Industries is now collecting at stated intervals separate data on wages for men and women, according to information received by this bureau. January, 1924, is the first month for which this information has been secured. Reports from 349 establishments showed average weekly earnings for that month of \$28.53 for males and of \$17 for females. A table giving the average weekly earnings of these two classes of employees in the different industries in the State for January, 1924, is published on page 137 of this issue of the MONTHLY LABOR REVIEW.

The department is revising the rules relating to the painting trades. A committee has been organized to investigate the situation and submit recommendations. Dr. Wade Wright of the Harvard Medical School has been asked to be chairman of this committee.

The minimum wage commission has recently finished the field work of an investigation of women's wages in the jewelry industry in Massachusetts.

Pennsylvania.¹

IN DECEMBER, 1923, and January, 1924, the Pennsylvania Department of Labor and Industry held six safety conferences with industrial executives, safety experts, and other persons interested in the subject under discussion. These meetings were held in Philadelphia, Pittsburgh, Reading, Scranton, Erie, and Johnstown.

The secretary of labor and industry emphasized the fact that the only way to reduce accidents in the State was to have each establishment completely organized as a safety center for that particular locality. A state-wide safety conference is scheduled to be held at Harrisburg in February or March.

¹ Pennsylvania. Department of Labor and Industry. Labor and Industry, Harrisburg, February, 1924.

CURRENT NOTES OF INTEREST TO LABOR.

International Labor Conference, 1924.¹

THE following are the four subjects on the adopted agenda for the sixth session of the International Labor Conference to open in Geneva, June 16, 1924:

- (1) Development of facilities for the utilization of workers' leisure.
- (2) Equality of treatment for national and foreign workers as regards workmen's compensation for accidents.
- (3) Weekly suspension of work for 24 hours in glass manufacturing processes where tank furnaces are used.
- (4) Night work in bakeries.

Among the matters relating to the general work of the International Labor Organization that will also have to be taken up by the conference are:

Procedure for the amendment of conventions.

The report of the advisory committee on anthrax.

The report of the director on the activity of the International Labor Office in 1923 and on the measures taken by the different States to give effect to decisions of previous sessions of the conference.

A report on unemployment.

A report on the standard of living in countries with a severely depreciated currency.

Proposed International Conference on Legal Aid Work.

THE proposed international conference on legal aid to be held, presumably, in Geneva in 1925 has been called to the attention of this bureau by Reginald Heber Smith, of Boston, who has been making a special study of the subject of legal aid. Pursuant to the action of the fourth assembly of the League of Nations in 1923 in placing on the agenda of the fifth assembly the question of international arrangements for civil justice for the poor, plans are being made for this conference and are being carried forward by the director of the legal section of the secretariat of the league. It has been recommended that a small committee of experts consisting of representatives from the United States, England, France, Norway, Denmark, Italy, and perhaps other countries meet at The Hague in July or August, 1924, to arrange the preliminary work for the conference. The main purpose of the conference is to provide for international cooperation in handling legal aid cases of the poor.

A national association of legal aid societies has been organized in this country and is located at 133 South Twelfth Street, Philadelphia, Pa. In the larger cities questions regarding legal aid can be referred to local legal aid bureaus or societies and in the smaller cities to members of the American Bar Association.

¹ International Labor Office. Industrial and Labor Information, Geneva, Jan, 28, 1924.

The problem of social justice is common to all industrial countries and different methods of dealing with this problem have been adopted by various countries. It is believed that the proposed international conference will result in more intelligent procedure and in a larger fund of reliable information in connection with this important subject, and that the benefits to those whom it is intended to protect will be pronounced.

Industrial Association in Chile.²

THE Industrial Association (*Asociación del Trabajo*) in Chile is the most important employers' organization in that country, having a membership of 1,100 persons, employing a total of 110,000 workers. To improve conditions of the workers, the association has established labor offices, employment agencies and exchanges, clinics, hospitals, agricultural hygiene stations, vaccination centers, and a system of accident insurance. A dental clinic, a workers' club, a savings bank, and an office for legal advice are other achievements of this society. Its publication is called *Horizontes Nuevos*.

Creation of Labor University in Chile.³

A LABOR university costing 300,000 pesos (\$109,500, par) is to be founded in Santiago, Chile, during 1924 by the municipal government through the efforts of the mayor of the city. The aims of the university will be to educate and train working men and women in trades most suitable to their natural abilities.

There will be separate sections for men and women. The university will consist of two departments, one devoted to vocational guidance and the other to the teaching of definite trades. In the vocational guidance department the students will be able to obtain a good general education as well as instruction in modern industrial methods, while in the trade department they will receive a course of specialized industrial and technical instruction in the trade they have chosen. In the trade schools the pupils will work under conditions identical with those in well-regulated workshops and will be paid for their work. Instruction in motor driving, in the wood and metal trades, in printing, and in electricity will be included in this department besides training in other well-known trades. The course in the various trade schools will be three years.

Income Tax Rates of German Workers.

THE following report was recently received from the Bureau of Foreign and Domestic Commerce:

Recent changes in the German taxation policy will affect the workers as well as other groups of the population. The most recent taxation regulation, effective January 1, 1924, radically changes the present system of taxing the workers.

² El Mercurio, Santiago, Chile, Sept. 3, 1923, p. 21.

³ El Mercurio, Santiago, Chile, Dec. 15, 1923, p. 7.

Heretofore 10 per cent of total wages minus certain sums (*Lohnabzüge*), fixed according to the size of the worker's family, have been deducted from the pay envelope and turned over by the employer to the State. According to the new regulation labor's taxes will no longer be levied on total wages. The new system fixes a definite sum, mentioned below, which is to be exempt from taxation, regardless of the size of the worker's family or of the amount of total wages. This sum has been fixed at 50 gold marks [\$11.91, par] monthly, or, if as is usually the case, wages are paid weekly, at 12 gold marks [\$2.86, par] weekly (and 2 gold marks [47.6 cents, par] daily).

After this sum has been deducted from the total wages 10 per cent is levied as taxes from the unmarried worker, 9 per cent is levied from the married worker, 8 per cent from the married worker with one child, 7 per cent from the married worker with two children, and 1 per cent less for each additional child.

The working out of this system of tax levy is illustrated by the following examples: An unmarried worker, earning 30 gold marks [\$7.14, par] weekly, will be taxed 10 per cent on $30 - 12 = 18$ gold marks [\$4.28, par]; viz, his taxes will amount to 1.80 gold marks [43 cents, par] weekly. A married worker with two children who is earning the same wages is taxed 7 per cent; viz, 1.26 gold marks [30 cents, par] weekly. In order to now insure a prompt delivery of the workers' taxes to the State, the new regulation stipulates that employers must turn over their workers' taxes every ten days; at the latest five days after the 10-day period has elapsed.

Standardization of Coal-Mining Requisites in England.

ACCORDING to the Board of Trade Journal (London) for January 31, 1924, the British Engineering Standards Association has undertaken the standardization of colliery requisites. A central committee is being formed, and local committees are being set up in the various centers. At first the committees are expected to concentrate on a limited number of the more important questions, "such as pit tubes, rails, and rope sheaves, of which there are far too great a variety of types in existence." It is pointed out that this movement will tend to diminish waste both of time and of material, and that such savings have a special importance in view of the fact that under the agreement of 1921, "the rate of percentage increase in the miners' wages depends upon the difference in the cost of production and the selling price of coal."

PUBLICATIONS RELATING TO LABOR.

Official—United States.

HAWAII (HONOLULU).—Industrial Accident Board. *Eighth annual report for the 12 months ending June 30, 1923.* [Honolulu, 1923.] 24 pp.

This report includes a brief statistical review and summary covering the administration and operation of the workmen's compensation law of the Territory of Hawaii from July 1, 1915, the date of enactment. A summary of the annual report is given on pages 175 and 176 of this issue of the MONTHLY LABOR REVIEW.

MASSACHUSETTS.—Department of Labor and Industries. Division of Industrial Safety. *Lighting code for factories, workshops, manufacturing, mechanical, and mercantile establishments, effective January 1, 1924.* [Boston?] 1923. 6 pp. Industrial bulletin No. 18.

NEW YORK.—Department of Labor. Bureau of Women in Industry. *The trend of child labor in New York State, 1910-1922.* Albany, 1923. 18 pp. Special bulletin No. 122.

A summary of the findings of this bulletin appears on pages 102 and 103 of this issue of the MONTHLY LABOR REVIEW.

— — — Medical Division. *Injuries to the head and their sequelæ, by Dr. Raphael Lewy.* [Albany?] 1923. 44 pp. Bulletin No. 3.

This bulletin contains a discussion of different diseases developing as a result of injury to the skull, supplemented by a number of case histories of claimants for workmen's compensation.

NORTH DAKOTA.—Workmen's Compensation Bureau. *Fourth annual report for the fiscal year ending June 30, 1923.* Fargo [1923?]. 24 pp.

A summary of this report will be found on pages 176 and 177 of this issue of the MONTHLY LABOR REVIEW.

— — — *The North Dakota workmen's compensation act explained.* Safety. Bismarck, 1923. 32 pp.

This pamphlet outlines the principles underlying the North Dakota workmen's compensation law, its administration and results, the purpose of the publication being to familiarize the citizens of the State with the workings of the law. A section is devoted to a discussion of the necessity for greater attention to "safety" on the part of the general public.

WASHINGTON.—Department of Labor and Industries. *Safety standards, effective January 1, 1924.* Olympia, 1924. 96 pp.

UNITED STATES.—Civil Service Commission. *Civil service act and rules, retirement and classification acts, statutes, Executive orders and regulations, with notes and legal decisions, amended to September 1, 1923.* Washington, 1923. iii, 154 pp.

— Congress. House of Representatives. Committee on Immigration and Naturalization. *Restriction of immigration. Hearings on H. R. 5, H. R. 101, and H. R. 561, December 26, 27, and 31, 1923, January 2-8, 10, and 19, 1924.* Washington, 1924. 914 pp. 68th Cong., 1st sess. Serial 1-A.

Among the subjects discussed in this volume are the operation of the quota law, selective immigration, intelligence tests for immigrants, finger-print requirement for immigrants, alien seamen, farm labor, contract labor, unemployment, oriental students, illegal entry of Chinese, colonization and assimilation of immigrants, and certain communistic activities.

UNITED STATES.—Department of the Interior. Bureau of Mines. *Accidents at metallurgical works in the United States during the calendar year 1922*, by William W. Adams. Washington, 1923. iii, 31 pp. Technical paper 350.

A summary of this report appears on pages 144 and 145 of this issue of the MONTHLY LABOR REVIEW.

— — — — *Metal-mine accidents in the United States during the calendar year 1922*, by William W. Adams. Washington, 1924. v, 72 pp. Technical paper 354.

A summary of this report is given on pages 142 and 143 of this issue of the MONTHLY LABOR REVIEW.

— Department of Labor. Bureau of Immigration. *Immigration laws and rules of February 1, 1924*. Washington, 1924. 168 pp.

This publication contains not only the texts of the immigration laws but an analysis of these statutes under three heads: (a) Classes excluded; (b) administrative provisions; and (c) penal provisions. A detailed index of rules and regulations adds to the value of the compilation.

— Bureau of Labor Statistics. *Industrial relations in the West Coast lumber industry*, by Cloice R. Howd. Washington, 1924. vi, 120 pp. Bulletin No. 349. Miscellaneous series.

A brief digest of this report is given on pages 60 and 61 of this issue of the MONTHLY LABOR REVIEW.

— Children's Bureau. *Child labor and the work of mothers on Norfolk truck farms*. Washington, 1924. iv, 27 pp. Illus. Bureau publication No. 130.

A summary of this report is given on pages 103 and 104 of this issue of the MONTHLY LABOR REVIEW.

— — — — *State commissions for the study and revision of child-welfare laws*, by Emma O. Lundberg. Washington, 1924. v, 156 pp. Bureau publication No. 131.

An introductory statement defining the child-welfare commission movement and describing its general methods and aims is followed by a summary of the organization and plans of the commissions in the 29 States in which separate bodies of this type have been formed. The report contains also an account of the special legislative committees in Alabama, Colorado, and Illinois, a list of State commissions, compilations and summaries of State laws concerning children in need of special care, and various reports, bibliographies, and recommendations dealing with the subject.

— Women's Bureau. *Married women in industry*, by Mary N. Winslow. Washington, 1924. 8 pp. Bulletin No. 38.

A paper read before the National Conference of Social Work, Washington, D. C., May 21, 1923, emphasizing the need for a body of definite facts regarding the effect of the industrial employment of married women upon their families, themselves, and society, as a basis for any legislation intended to regulate such employment.

Official—Foreign Countries.

AUSTRALIA (VICTORIA).—Government statist. *Forty-fifth annual report on friendly societies for the year 1922*. Melbourne, 1923. xvi, 30 pp.

This report for 1922 shows 57 friendly societies, with 1,467 branches and a membership of 146,688. The total annual income in 1922 was £790,788 (\$3,848,370, par). Full details are given as to sources of income, annual contributions, expenses of management, value of property, and the like.

CANADA (ONTARIO).—Board of Health. Division of Industrial Hygiene. *Lead poisoning (a compilation of present knowledge)*, by R. M. Hutton. Toronto, 1923. ix, 304 pp.

Since lead poisoning is the most important industrial poisoning, being a hazard in approximately 150 different trades, and as there is a large amount of scientific material available as to its symptoms, treatment, and methods of prevention, the effort has been made in this book to bring together in small compass the most important of this information. The material used has been taken from standard works on lead poisoning, articles in scientific and industrial journals, and regular and special reports of government departments in various countries. The first part takes up the pathology and symptomatology of lead poisoning, laboratory and clinical tests for lead, prevention of lead poisoning, and treatment. A list is given of the lead trades and there is a detailed description of dangerous trades and processes with special preventive measures. The second part gives the text of laws and regulations enacted in the principal industrial countries and the recommendations or conventions adopted by the International Labor Organization of the League of Nations. There is a comprehensive classified bibliography.

CUBA.—Secretaría de Hacienda. Sección de Estadística. *Comercio exterior, años naturales 1921 y 1922*. Havana, 1923. xviii, 284 pp.

Statistics of foreign commerce of Cuba, including immigration statistics, for the years 1921 and 1922. During the year 1921, 58,948 immigrants arrived, of whom 49,819 were men and 9,129 women. In 1922 there were 25,993 immigrants, of whom 19,468 were men and 6,525 women. Since 1920, when 174,221 immigrants entered the country, there has been a rapid decrease in immigration to Cuba. The nationalities having the largest representation were Spaniards, Haitians, and Jamaicans.

FINLAND.—[Handels- och Industri Ministeriet. Handels- och Industristyrelsens Statistiske Byrå.] *Industristatistik 39, år 1922*. Helsingfors, 1923. iv, 81 pp. *Finlands officiella statistik XVIII A*.

Contains industrial statistics of Finland for the year 1922, including wages and production costs.

—[Socialministeriet.] *Statistiska Centralbyrån. Statistisk årsbok för Finland, 1923*. Helsingfors, 1924. xxi, 290 pp.

Statistical yearbook for Finland for 1923. Some of the statistics of interest to labor in the yearbook are statistics on accident insurance, wages, industrial accidents, labor disputes, General Federation of Trade-Unions in Finland, Central Association of Employers in Finland, cost of living, and prices.

—[Sosiaaliministeriö.] *Tutkimus metsä- ja uittotyöntekijäin oloista keväällä 1921*. Helsingfors, 1923. 57 pp. *Illus. Suomen virallinen tilasto XXXII: Sosialisia erikoistutkimuksia IV*.

This study by the Ministry of Social Affairs deals with working conditions in the Finnish lumber industry.

— — — *Tutkimus suomen maataloustyöväen oloista palkkausvuonna 1919–1920*. Helsingfors, 1923. 122 pp. *Illus. Map. Suomen virallinen tilasto XXXII: Sosialisia erikoistutkimuksia III*.

A study of the conditions of agricultural labor in Finland in 1919 and 1920, covering the length of the working-day at different periods in the year, the average wages paid in the different communes, and housing conditions.

FRANCE (DEPARTMENT OF THE SEINE).—Office Départemental du Placement et de la Statistique du Travail. *Rapport relatif au fonctionnement de l'office départemental du placement et de la statistique du travail et à l'organisation des secours de chômage pendant l'année 1922*. Paris, 1923. 208 pp.

A report to the General Council of the Seine in regard to the operation of the departmental office of employment and labor statistics and the organization of unemployment relief in the department of the Seine in the year 1922.

GERMANY.—[Reichswirtschaftsministerium.] Statistisches Reichsamt. *Statistisches Jahrbuch für das deutsche Reich, 1923.* Berlin, 1923. [Various paging.]

The contents of this forty-third issue of the official German Statistical Yearbook are of the same nature as those of preceding issues. The data relating to money values have, in most instances, lost all significance owing to the depreciation of German currency. Of special interest to labor are the data relating to labor disputes, production, housing, factory inspection, prices, cost of living, wages and salaries, social insurance, cooperative societies, the labor market, employers' and workers' organizations, and collective agreements.

GREAT BRITAIN.—Home Office. *Statistics of compensation and of proceedings under the workmen's compensation act, 1906, and the employers' liability act, 1880, during the year 1922.* London, 1923. 29 pp. Cmd. 2007.

A review of this report is given on pages 177 to 179 of this issue of the MONTHLY LABOR REVIEW.

— Imperial Economic Conference, 1923. *Record of proceedings and documents.* London, 1924. 620 pp. Cmd. 2009.

— — *Summary of conclusions.* London, 1923. 20 pp. Cmd. 1990.

The record gives the important speeches and discussions of the conference, which lasted from October 2, to November 9, 1923, while the summary gives merely the conclusions reached. The conference dealt largely with tariff preference, imperial communications, commercial facilities and statistics, and the like. Coordination of scientific and industrial research within the Empire was advocated, as was also the reciprocal enforcement of judgments, including arbitration awards, and imperial cooperation with reference to patents, designs, and trademarks. The action taken in regard to uniformity of practice concerning workmen's compensation is given on page 183 of this issue of the MONTHLY LABOR REVIEW.

— Industrial Fatigue Research Board. *Two studies on rest pauses in industry.* London, 1924. iv, 34 pp. Report No. 25.

This study of rest pauses in occupations involving light repetitive work shows the effect of rest intervals on output. It was impossible to determine the absolute effect of the rest pauses as their introduction was usually accompanied by other important changes in the conditions of work. A study of their application in the actual occupations and a series of laboratory experiments both seemed to show, however, that the introduction of systematic rest pauses was almost always followed by a slight, but genuine, improvement in output. It was found that the effect upon output is not immediate, that it takes several months for the effect of the rest pause to reach its full extent.

— Ministry of Agriculture and Fisheries. Committee on Distribution and Prices of Agricultural Produce. *Final report.* London, 1924. 42 pp. Cmd. 2008.

The committee was appointed in December, 1922, to consider the methods and cost of distributing and selling agricultural produce in Great Britain, and to see whether such costs could be reduced. They report that agricultural prices have fallen disproportionately to the general cost of living, and that both the farmer and the farm laborer are suffering therefrom. Also, they find that the spread between producers' and consumers' prices is unjustifiably wide.

The various agencies engaged in the handling and transport of produce from the farm to the home have been able to pass on their labor and other costs to the consumer and in the absence of effective public opinion, through lack of accurate information, they have had no special incentive to effect reductions, and no very special pressure has been put upon them to do so. Consequently, by maintaining comparatively high prices, they have to some extent limited the quantity of goods which the consumers could obtain with their purchasing power, and hence the quantity which the producers could sell and which they could continue producing. This can not be regarded as a service to the nation as a whole, and it has been a very definite disservice to the agricultural industry.

As to remedies for this situation, the committee is rather vague. On the producers' side the development of a marketing sense, the formation of marketing organizations, and the grading and standardization of products are recommended. Distributors are urged to adopt ideals of constructive public service, and "to work steadily forward in the direction of devising less expensive methods and of adapting their trading policies to the fundamental requirements of economical distribution." Railways, it is suggested, might bring their rates into some relation to the wholesale prices of separate commodities, instead of adopting a uniform rate for all agricultural produce. Municipal retail markets might have some effect, and the buyer could help the movement along by "shopping around" and not requiring delivery service. The development of large wholesale trading units might do much toward bringing down costs, and enforced publicity as to their capital, assets, and returns might prevent them from using the monopoly power their size would give them. Cooperation among farmers, especially in marketing, is held desirable, but the committee admits that there are many difficulties in the way of establishing successful cooperative bodies of this kind. The advancing of public credit for the use of such societies, under strict safeguards, is recommended. Finally, it is strongly urged that the Government should "interest itself in the efficiency with which the farmers' crops are marketed and distributed, in the costs which these processes entail, and in the acquisition and dissemination of accurate information." In other words, they recommend that the English Government should undertake some of the services rendered by our Department of Agriculture, agricultural colleges, and the like.

INDIA.—Department of Mines. *Report for the year ending December 31, 1922. Calcutta, 1923. v, 126 pp.*

Contains among other data statistics showing that for the year 1922 there were 243 fatalities in the mines of British India, which was a death rate of 1.06 per 1,000 persons employed. Falls of roof and sides were the commonest causes of fatal accidents, accounting for 122 deaths. Of those killed, 25 were women.

INTERNATIONAL LABOR OFFICE.—*Industrial hygiene and safety and the International Labor Organization. Geneva, 1923. 60 pp. Studies and reports, series F (industrial hygiene), No. 9.*

This is a collection of papers dealing in a general way with the problems of hygiene and safety and the work of the International Labor Office in endeavoring to formulate international standards for the prevention of industrial diseases and accidents. The papers were read at a conference held in London in June, 1923, by the League of Nations Union of Great Britain.

NETHERLANDS.—[Ministerie van Binnenlandsche Zaken en Landbouw.] Centraal Bureau voor de Statistiek. *Werkstakingen en uitsluitingen gedurende het jaar 1922. The Hague, 1923. 28 pp. Statistiek van Nederland No. 374.*

A report of the Central Statistical Office of the Ministry of the Interior and of Agriculture on strikes and lockouts in the Netherlands during the year 1922. A brief digest of the report is given on pages 209 and 210 of this issue of the MONTHLY LABOR REVIEW.

NORWAY.—[Departementet for Sociale Saker.] Statistiske Centralbyrå. *Industristatistikk for året 1921. (Opgaver over ulykkesforsikringspliktige bedrifter og arbeidere.) Christiania, 1923. 25*, 20 pp. Norges offisielle statistikk, VII, 91.*

Industrial statistics for Norway for the year 1921. Contains reports on establishments and workers subject to the accident insurance law and industrial development during the period 1897-1921.

— (CHRISTIANIA).—Statistiske Kontor. *Statistisk aarbok, 1923. Christiania, 1924. xiii, 222 pp.*

Statistical yearbook for the city of Christiania for 1923. Some of the statistics of interest to labor are on housing and housing conditions, prices, wages, strikes and lockouts, etc.

SPAIN.—Consejo Superior de Emigración. *Resumen de la migración española en 1921. Madrid, 1923. 29 pp. Charts. Bulletin No. 123.*

This report presents a résumé of Spanish emigration and immigration during the year 1921, including statistical tables and charts. During the year 1921, 62,479 persons emigrated and 76,439 immigrated. Of those emigrating, 35,606 left for Argentina, 19,427 for Cuba, 2,068 for Mexico, 598 for the United States; the remainder went to other Central and South American countries. Of those immigrating, 50,238 came from Cuba, 13,514 from Argentina, 9,245 from the United States, 626 from Mexico, and the remainder from other Central and South American countries.

SWEDEN.—[Socialdepartementet.] Socialstyrelsen. *Levnadskostnaderna på landsbygden i Sverige vid år 1920. Stockholm, 1923. 143*, 71 pp. Sveriges officiella statistik. Socialstatistik.*

In this report the Labor Bureau (*Socialstyrelsen*) publishes the results of a cost-of-living investigation among the less well-to-do in the rural districts in Sweden covering the year 1920.

Unofficial.

BROWN, NELSON COURTLANDT. *The American lumber industry. New York, John Wiley & Sons (Inc.), 1923. xviii, 279 pp.*

The most important question in the lumber industry at the present time is that of forest conservation and the future source of raw material. This question is also of great and increasing importance to the economic life and welfare of the American people. The entire history of the industry, its methods and processes, distribution and merchandising, and consumption, and the various associations and agencies concerned in the production of lumber and the conservation of our forest reserves are treated of in this work, especial stress being laid on the phases of the industry on which there is relatively little published material available. The book is planned "to serve as a textbook in forest schools; as a practical aid for those engaged in the lumber industry; and as a source of reference for the general public interested in national phases of this industry, particularly its economics, statistics, and merchandising methods, and the part it plays in our national welfare."

CAMPBELL, PERSIA CRAWFORD. *Chinese coolie emigration to countries within the British Empire. London, P. S. King & Son (Ltd.), 1923. xxiii, 240 pp.*

Two parts of this volume deal respectively with the "credit-ticket" system of Chinese emigration and Chinese "contract emigration." Under the first head the coolie traffic in British Malakka and Chinese emigration to Canada, Australia, and New Zealand are discussed. The subjects of the chapters in part 2 are: Foreign competition for Chinese labor, 1845-1874; The Transvaal experiment, 1904-1909; and The present system in the South Pacific Islands.

COLUMBIA UNIVERSITY. *Business fluctuations and the American labor movement, 1915-1922, by V. W. Lanfear. New York, Longmans, Green & Co., agents, 1924. 132 pp. Studies in history, economics, and public law, Vol. CX, No. 2.*

This is an analysis of the various phases of the business cycle, such as wages, cost of living, unemployment, labor mobility, and absenteeism, in relation to the development of the labor movement, the attitude of the American Federation of Labor and the Amalgamated Clothing Workers of America being taken as typical of the aims and desires of organized labor.

FAUVET, M. P. *Les allocations familiales et les caisses de compensation. Nancy, Imprimeries Réunies, 1922. 7 pp.*

An address in favor of the extension of family allowances and the affiliation of the members of the industrial associations of France with compensation funds for the payment of such allowances.

GUESDON, VICTOR. *Le mouvement de création et d'extension des caisses d'allocations familiales.* Paris, Éditions de la Vie Universitaire, 1922. 280 pp.

The principal subjects treated in this volume are: Depopulation and State intervention, wages and the cost of living, history of compensation funds for family allowances, the results secured from the operation of such funds, their future, and the question of making them compulsory. Appendixes contain valuable information in connection with matters under discussion.

INSTITUTE FOR GOVERNMENT RESEARCH. *The development of national administrative organization in the United States, by Lloyd Milton Short.* Baltimore, Johns Hopkins Press, 1923. xviii, 514 pp. *Studies in administration.*

The rapid development and extension of Government services, particularly during the past two decades, prompted this study. An account of the administrative organization of the Government as a whole in its historical development is given, divided into two periods—from 1775 to 1860 and from 1860 to the present time. The work contains a very complete account of the organization and functions of the different departments, of the administrative war agencies established during the World War, and of recent administrative reorganization.

JENSEN, ADOLPH. *Méthodes permettant de réaliser une économie de travail dans la statistique.* Copenhagen, Bianco Luno, 1923. 30 pp.

This study of statistical methods is aimed at securing economy of time and effort in gathering and presenting statistical information. It was presented at the fifteenth session of the International Institute of Statistics in Brussels in 1923.

KOBER, GEORGE M., AND HAYHURST, EMERY R. *Industrial health.* Philadelphia, P. Blakiston's Son & Co., 1924. lxxii, 1184 pp.

This volume is a revised and extended edition of Kober and Hanson's "Diseases of Occupation and Vocational Hygiene." In addition to the list of contributors to the earlier volume, most of whom have been retained, the list has been increased by a number of new names widely known in their special branches of industrial health. Most of these new contributors have added new subjects to the volume such as industrial medical services, industrial nursing, standards in sanitation, official and voluntary health agencies, etc., while the former contributors have practically all amplified and brought up to date the original material. The preface contains an extensive historical discussion of the development of industrial hygiene in the leading industrial countries. There is also a review of labor and factory legislation in this country and of American literature relating to industrial hygiene and occupational diseases. The first section of the book deals with the general principles of maintaining health, and the second with the vocational hygiene of certain industries and callings which are particularly hazardous. Part III treats of specific occupational diseases with hygienic descriptions of the industries in which they chiefly occur. This part is divided into sections relating to occupational intoxications; occupational infectious diseases; occupational diseases due to dust, to fatigue, to abnormal atmospheric pressures; and electrical injuries and electrical shock. Part IV is of a more "medico-technical nature" and relates to the systemic occupational diseases such as affections of the eye, ear, and skin; diseases of the blood, circulatory system, and kidneys; and cancer. Most of these must be carefully differentiated from the same disabilities which are due to other factors than industry. Part V covers the general principles of industrial health administration, including discussions of mortality and other vital statistics, the methods and scope of protective legislation, the work of women and children, and the administration of the United States employees' compensation act. The appendix contains charts for analyzing industrial health and occupational disease data. There are extensive lists of references attached to different chapters and there is both a subject and an authors' index.

LEISERSON, WILLIAM M. *Adjusting immigrant and industry.* New York, Harper & Bros., 1924. xv, 356 pp.

This volume is one of a series of 11 Americanization studies financed by the Carnegie Corporation of New York. Among the subjects treated in the above publication are industry and Americanization, finding a place in American industry, management of immigrant employees, training the immigrant workers, organized labor and the immigrant, the Government's responsibility, immigrant self-help, and special problems of the woman immigrant worker. In the final chapter there is a discussion of the adjustment of the immigrant to the conditions of American economic life.

NATIONAL INDUSTRIAL CONFERENCE BOARD. *A manual for mutual benefit associations.* New York, 1924. iii, 48 pp. Research report No. 66.

This report supplements research report No. 65, "Experience with mutual benefit associations in the United States," which was noted in the MONTHLY LABOR REVIEW for February, 1924 (p. 256). The factors shown by the former study to be of importance in securing the success of these organizations are summarized in this report for the use of employers and employees who are considering establishing mutual benefit associations.

NATIONAL SAFETY COUNCIL. *Proceedings of the twelfth annual safety congress, Buffalo, N. Y., October 1-5, 1923.* [Chicago?] 1924. 1166 pp.

A brief summary of the work of the congress was given in the MONTHLY LABOR REVIEW for November, 1923 (pp. 175, 176).

PEOPLE'S YEARBOOK AND ANNUAL OF THE ENGLISH AND SCOTTISH WHOLESALE SOCIETIES, 1924. *Manchester, England, Cooperative Wholesale Society (Ltd.), 1 Balloon St., [1924].* 368 pp. Illus.

Contains a review of developments in the field of cooperation, and information on the subjects of the relations of cooperation and labor, the "industrial labor movement," housing, and general economic subjects. The cooperative movement, especially that of the United Kingdom, naturally receives the greatest amount of attention. Certain statistics of the movement in Great Britain, Austria, and Portugal, taken from this report, are given on pages 203, 205, and 208 of this issue of the MONTHLY LABOR REVIEW.

PLAN OF NEW YORK AND ITS ENVIRONS. *The chemical industry in New York and its environs, present trends and probable future developments, by Mabel Newcomer.* New York, 130 East 22nd Street, 1924. 49 pp. Economic series, monograph No. 1.

The committee on the plan of New York and its environs is making a study of social and economic conditions which affect this great area having a population of nearly 9,000,000. The purpose is to make more adequate provision than has been done in the past for efficiency and convenience in all forms of industry and business and for better and more healthful living conditions. This pamphlet on the chemical industry is the first of a series of economic and industrial surveys of the 12 principal economic activities of the metropolitan region, showing the existing location and importance of the activity, growth and movement during the past 25 years, and probable future demands of the industry upon location, space, and workers.

ROMANET, EMILE. *Les allocations familiales.* Lyon, *Chronique Sociale de France* [1922?]. 20 pp.

This pamphlet gives a brief account of the origin, functions, and advantages of family allocations. The last few pages contain practical information concerning the establishment and administration of a compensation fund for family allowances.

SELLS, DOROTHY. *The British trade boards system.* London, P. S. King & Son (Ltd.), 1923. vii, 293 pp.

A summary of this study is given on pages 99 to 101 of this issue of the MONTHLY LABOR REVIEW.

WOOD, EDITH ELMER. *Housing progress in western Europe*. New York, E. P. Dutton & Co., 1923. viii, 210 pp.

Reviews the progress made in providing working-class housing in Great Britain, Belgium, France, Italy, and Holland, dwelling especially upon the extent to which State action has been considered necessary, and the different methods by which State help has been made available. An appendix deals briefly with housing legislation and developments in Spain, Portugal, and Switzerland.

The author points out that the provision of homes for the lower economic strata, whether these be made up of industrial or office workers, has been taken over as a public utility pretty generally throughout western Europe.

"The machinery for handling it as such is fully developed in England and in Holland, and is in process of development in France, Belgium, and Italy. Each of these countries proposes, within the lifetime of the present generation, to abolish slums and near-slums and to rehouse its working population under conditions that make for health, efficiency, and contentment."

In Great Britain and in Holland, the two countries which have done most in providing homes for their people, municipal housing seems to be the approved form. In France the work of the Public Housing Offices, which corresponds to the municipal housing of Great Britain, is well started. Belgium and Italy work through a combination of public and private agencies, but these have not been in operation sufficiently long to show whether they will be able to handle large-scale housing as effectively as the wholly public agencies of the other countries have done.

Theoretically, housing standards are much the same throughout the countries studied. "In practice it is highest in Great Britain, where the bathroom is a reality and not simply an ideal, and where the cottage in a garden is being built even in great cities. In Italy and France the large apartment house is still intrenched, and in Holland and Belgium the small one. The cottage in a garden is also being built extensively in Holland, Belgium, and France, and is making its appearance in Italy."

An appendix contains a bibliography dealing with housing conditions, before and after the war in the countries studied.

